DEVELOPMENT OF EFFECTIVE EDUCATION SYSTEM

Dr. Neha Jain
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CONTENTS

CHAPTER 1

A STUDY ON WOMEN LEADERSHIP AND EMPOWERMENT

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ABSTRACT:Women's empowerment may be regarded as promoting women's sense of self-worth, their freedom to determine their own decisions, and their right to impact social change for themselves rather than others. Women leaders are far more transformational than male leaders. They act as only a leadership position among their subordinates. They support their squad but also spend considerable time mentoring their team. This study presents an overview of leadership studies, focusing especially on women as leaders. The more recent approach of researching leaders through investigating followers is highlighted, yet data is scant as to how leaders are viewed as empowering by their subordinates. However, a leader's capacity to be empowering changes with rank. The greater the status, the farther powerful that person is viewed, whether female or man. Yet, more men than women worked higher profile jobs. More women are essential in high-level occupations to appropriately measure leadership or empowerment.Empowering women is crucial towards the health or economic growth of families, communities, and society. When females are living secure, joyful as well as successful lives, they can attain their full potential.

KEYWORDS:Communication, Empowerment, Leadership, Women.

1. INTRODUCTION

At the local, national, or global levels, women are constantly making their leadership presence known in the business, management, education, engineering, health, or other fields. Women are increasingly determined to break through the conventional glass barrier that prevented women from rising to positions of leadership, even if they have the necessary abilities and aptitude.In current times, women are continually changing and accomplishing new milestones throughout a broad range of human activities. Women leaders have emerged over the globe, including Hillary Rodham Clinton, Oprah Winfrey, Indra Nooyi,Theresa May, and Christine Lagarde, to mention a few[1], [2].

Every year, women have demonstrated that they could be on par with males, if not superior, in management and making effective business choices. The contribution of female leaders such as Indra Nooyi, Mazumdar-Shaw, Dr. Kiran Neelam Dhawan, etc. has demonstrated that women must be at the top-level management for maximum success. Among other causes, here's how females have positively generated an effect on business:

- Women provide diversity to the thought process which contributes to good decision making. Most goods or services are employed by both men or women, or a female viewpoint might assist the firm to better respond to the requirements of women included with the target audience.
- The management styles of females are considerably different from those of males. Women make it simple to create professional connections, they get things differently for the ultimate advantage of the company. It has been shown that workers feel more comfortable and involved if there is a woman in senior management.
- Most females have to establish a balance between their family life and employment, which makes them the ideal example of how time should be handled and used to its greatest capacity. If a woman is integrated into high-level management via leadership recruiting, it offers the entire business a framework to attain efficiency through perfect time management.

1.1. Leadership:

Regardless of its size and activities, every company needs a leader. A "muddle of men or machine" is a leaderless organization; anarchy is a nation without leadership, or a society absent leadership is a powerful and aggressive place to live. A leader is someone who motivates and inspires a group of people to achieve their objectives. The ability to persuade people to achieve objectives and improve themselves is a characteristic of leadership. "Leadership is the capacity of a superior to influence the conduct of subordinates or groups and convince them to adopt a specific course of action," says Chester Barnard[3], [4].

1.2. Gender has no bearing on leadership:

It is a collection of leadership attributes that are either natural or fostered in people who grow into great leaders with a large following. Men and women may both be leaders. Even though both men and women may learn and demonstrate leadership abilities, there are certain variations in the underlying features and attributes that males and female leaders possess. Males and females, on the whole, have quite different leadership styles[5], [6].

1.3. Women's Leadership Characteristics:

1.3.1. Leadership Style: Transformational:

Women are more transformative than males when it comes to leadership. They serve as an example to their subordinates. They motivate their squad and devote a significant amount of effort to coaching them. They are concerned with their growth. As a cornerstone to success, women leaders stress cooperation and real communication. For the majority of female leaders, leadership is about converting their followers into better people, not only achieving corporate objectives[7], [8].

1.3.2. Task-Focused:

Women leaders are usually focused on meeting deadlines and completing tasks allocated to them. Completing day-to-day duties is crucial for the company's efficient running from an operational standpoint.

1.3.3. Work in a team environment:

Women want to lead and build flat organizational structures that allow everyone to work independently in a collegial environment. The expertise and wisdom of seasoned workers and management are overlooked because of the flat organizational structure. Women executives are often critical of an organization's hierarchical structure.

1.3.4. Encourage collaboration and cooperation:

Working together with others is a typical feminine trait. Women leaders usually encourage team members to work together and cooperate. In this instance, all team members must be clear about their duties and responsibilities; otherwise, duplicate work would ensue.

1.3.5. Communication Procedure:

Women leaders are more likely to be participative and democratic in their leadership styles. They seem to despise female leaders' "command or control" attitude. Women often explain their expectations of a task indirectly, giving themselves greater leeway in achieving a goal. It may occasionally assist team members in using their talents and knowledge to execute the assignment, but it can also be a disadvantage if the given task necessitates a leader to communicate directly with the members.

1.3.6. Self-Branding:

Women leaders, unlike their male colleagues, typically look humble or mute about their successes. They are seldom successful in branding themselves. Female leaders, on the other hand, must learn how and where to brand themselves by sharing their accomplishments and abilities with others. People will not appreciate a woman leader's leadership skills until they know or realize what they are capable of.

1.4. The Importance of Women in Leadership:

In the twenty-first century, any institution, if it is a community or an organization, cannot operate successfully without women's equal involvement in leadership activities. Women contribute a viewpoint to businesses and teams that encourage competitiveness and cooperation.Organizations managed by inclusive executive leadership make effective judgments that provide greater results in today's world. The capacity to cooperate,empathize, connect, or communicate isa crucial leadership trait in the twenty-first century. All of these characteristics are feminine and may contribute to the creation of a more sustainable future.Many studies demonstrate that businesses run by women do better financially. Women's leadership is critical for accelerating social development at home or work. Female leaders are more likely to bring work and family together, resulting in a more engaged and hopeful personally and professionally future.Gender balance in leadership is critical because meaningful advancement requires a range of viewpoints in leadership positions[9], [10].

1.4.1. Women's Representation in Various Sectors:

The proportion of women employed in various industries is referred to as the "representation of women in diverse sectors." Women have historically been disadvantaged in politics, education, business industry, science and technology, and other fields. However, the situation is progressively changing.Women account for 52 percent of the overall population in the United States. They obtain over 61% of all bachelor's degrees but also 65% of all master's degrees. Laws, medical degrees, business management, or management are all areas where they excel. Women make up 48% of the working force in the United States and 50% of the university workforce.In the United States, women hold 55 percent of professionals or middle-management positions. However, whenever it relates to representation in leadership roles, they trail well behind males. While they make up 45 percent of the entire S and P (Standard or Poor's) and 38% of the first and middle-level administrators in those organizations, they only make up 25% of executive or senior-level officials as well as managers.They make up 48 percent of associates in the legal industry, but just 21 percent of partners and 18% of equity partners. Women make up 35.5 percent of all doctors and 26% of permanent medical school deans in the medical field. In academia, women account for just 30% of full professors and 26% of college presidents. Women make up just 6.3 percent of the total members of Congress, but women make up 19.4 percent of Members of Parliament in the United Kingdom. Only 13% of governors and 17% of mayors in the top 100 American cities are African-American[11], [12].

Women make up 30.8 percent of local councilors in the United Kingdom.Women account for half of the world's working-age population. Historically, companies run by women have fared better than their male counterparts during financial crises. According to Pew Research Center research on women and leadership, there is no difference between men and women in essential leadership attributes such as innovation and intellect, and many women believe they are even better than men when it comes to compassion and organization.The advantages of female leadership in many areas are numerous and just as considerable as those of male leadership. Women's leadership has been demonstrated to be beneficial to an organization's

financial health. Female board members have a much higher financial performance than organizations with low female participation.Better financial health means more employment possibilities, increased productivity, and more growth and development for the company. Women, according to much research, have superior relationship-building abilities than males.

They've also been discovered to be adept at motivating and inspiring others.Women, in general, are symbols of collaboration and solidarity. They are essential to the existence of a family the most fundamental social structure. Successful leadership requires the ability to bring disparate thoughts in a family together. A true leader operates as a unifying force, uniting the team or group of followers and effectively leading them to the desired outcome. Women have a lot of qualities, which makes them excellent leaders.Diverse individuals with diverse interests, qualities, and attitudes are referred to as diversity. A woman leader views variety as a benefit in creating a balanced and distinctive group interaction. She continues to lead by uniting a group's disparate interests, attitudes, and goals. Respect and acceptance are also part of the concept of diversity. It entails recognizing that each person is different and identifying those differences.Compassion, patience in listening to others, valuing the personal development of followers, taking a democratic approach to solving problems, and above all, womanly care of fellow human beings makes women a favored option for leadership among varied groups. These characteristics aid women leaders in uniting disparate groups for the common good and the achievement of long-term objectives.

1.4.2. Interpersonal Relationships Are Improved byWomen:

Communication skills are required to be a high achiever or a successful leader in this era of science or information technology. If an organization's interpersonal, interdepartmental, including external communication systems are effective, it will run smoothly. Both upward and downward communication must be operational inside the business to promote accurate and faster communication across workers or departments.Female leaders are routinely ranked higher than their male colleagues when it comes to creating connections. Women who are good at developing internal relationships are also good at building external relationships, such as finding new customers or negotiating complex contracts for the firm they oversee.

When it comes to intimate communication, women do well. They are very good at talking with people and outperform males in this area. To be a good leader, you must be able to communicate effectively with others. Women are born with this ability.Women are better listeners than males, which helps them communicate effectively. Listening skills are essential for good communicators. Listening is the foundation of effective communication. Women are good at listening and communicating than males.

1.4.3. Accountability is crucial to women:

Accountability is another crucial leadership trait. Women seldom shirk their responsibility in any situation. Women are seen to be more responsible than males. Responsibility may not be effective in encouraging others, but it is very motivating.A leader who appreciates the need for responsibility never blames individual team members for a loss or gaffe. The leader is the one who bears the brunt of the blame. It encourages teams to take on any job without hesitation or fear.Women are more aware of the importance of responsibility than the rest of the population. When leading a family, individuals often step forward to accept responsibility for any disruptions to maintain the family's cohesiveness. They provide a significant contribution to fostering family unity and togetherness. When these qualities of women are used to lead an organization, a community, or a nation, they perform wonders.

1.4.4. Collaboration is welcomed by women:

Collaboration, or the ability to collaborate, is primarily a feminine trait. Collaboration is defined as working together with others to achieve a shared goal. This helps leaders advance in their careers since public support stays with them however long as they work together.Because collaboration is in their DNA, women leaders can cooperate with coworkers, clients, or workers across teams, sectors, or departments. Females are more collaborative than males, according to several research.Women are more drawn to collaboration than males, according to a report published by the National Bureau of Economic Research. Males often exaggerate their talents while trying to downplay those of their peers. Females, on either hand, have a greater sense of their talents and are thus open to recommendations and assistance from their colleagues.

Women, in general, are better teamers than males.In general, women are transformative leaders. They are aware of team members' particular wants and aspirations and communicate with them on a personal level. Women leaders' individualized approach strengthens the bonds between team members, or they work more to achieve the objective.Apart from the aforementioned advantages, women leaders have a proclivity to see the bright side of events or circumstances and to stay upbeat throughout. Women leaders, under their optimism, have a good track record of achieving positive results. Optimism promotes the growth of confidence. Faith and trust are at the heart of confidence. Women leaders are more self-assured and believe in the good intentions of their followers. This assists them in gaining the ready support of their followers, which in turn assists them in achieving success[13]–[15].

1.4.5. Social Environment that is Safe:

A supportive social environment is required for the development of long-term female leadership. A welcoming and safe social environment is essential for women's overall development and preparation for leadership positions. She needs the unwavering support of both her family and the community wherein she lives to fully achieve her potential.

- Many women leaders have risen to prominence in communities where women are given proper respect, given the opportunity, and permitted to express themselves.
- Empower women to just be competent leaders If a safe and secure social climate is created or women are allowed to lead, they will be as effective or successful as, if not even more, then their male counterparts.
- Encourage and create trust Whenever a woman would feel safe or comfortable in society, she is more likely to engage in leadership activities. Women gain confidence in themselves when they are in a safe social situation.
- Boost self-esteem Women's self-esteem is boosted by a stable socio-cultural setting. It removes their worries and insecurities, allowing them to reach their greatest potential.
- Create opportunities Women have many opportunities to learn and demonstrate their leadership abilities in a safe social context. Women who are free to travel, express themselves, and participate in community-building activities are more likely to achieve growth and success.

2. LITERATURE REVIEW

Busse Ronald et al. examined Integrated Leadership Review Literature, Concepts, and Research. The author gives light just on the historical underpinning of leadership ideas and then elucidates current leadership techniques. After comparing leadership and management, the paper discusses the overcoming trait theories, highlights the still prevalent behavioral or

relational methods, and delivers insights into the newest research on the effectiveness of the transformational leader. The paper critically mixes historical leadership basics with consequences for present practicing managers. Other researchers caution that transformational leader changes down from the top hierarchical level to be implemented across an organization, which may produce conflicts between the goals of various organizational departments. Finally, the advantages of transformational leadership exceed its flaws but additional study is required to substantiate the prospective outcomes of this technique [16].

J. Francis Eastet al. investigated Ladies, Poverty, or Trauma, An Empowering Practice Approach. The method is the outcome of 20 years of experience creating, implementing, or assessing this practice in a metropolitan community, but is anchored on female empowerment theory and social-cultural theory. The treatments blend social work's treatment plans with social organizing techniques to enhance personal and communal empowerment, reinforcing the private is political principle of feminist practice. The approaches, including non-clinical interviews, narrative circles, including leadership or advocacy development and skills, may help practitioners in delivering services and programs that offer a place for women to change things in their own lives and their community. Women who participated additionally reported an improved feeling of authority, balancing similarity and uniqueness among women, and a sense of optimism for their future. Acknowledging that services but also supporting women must be framed in the social realm that privileges this same voices of men, this prototype has been proven successful due to its careful attention to the possibility for women to speak up but also share their experiences or to collectively create authority through partnerships with others[17].

E. Danielset al. investigated Building Empowerment as well as Leadership. To assist low-income women migrants to Israel from Ethiopia and the Soviet Union adjust, an interdisciplinary team created and performed a community program whose aims were to empower the women and encourage them to become active in the community and to become leaders. The results of the project were good. All the women were active in community events, felt empowered, and improved their leadership talents and a feeling of communal belonging. Only their perception of policy control did not suffer any major shift. However, it is crucial to accentuate these triumphs and do so by establishing and writing up successful programs and providing quantitative outcomes[18].

3. DISCUSSION

Women by far make superior bosses, Men allow their egos to dominate women are much better employers to work for. They are amazing listeners. They are democratic. They are lot more mentoring. Guys tend to bluff their ways into positions of leadership, in my perspective. It's no secret that women have traditionally faced more challenges than males when it came to fully engage in the economy. Across geographies or economic levels, discrepancies between men and women continue in the form of wage gaps, unequal chances for promotion, and imbalanced representation in crucial decision-making People have to work 3 times more merely to be acknowledged as intellectual equals. Things are changing for the better, but males are having to cope with roles they've never really had to play before, and women are discovering that life at the top is not that awful challenging.

People wish males could relax up a little and not let their egos or pride overshadow the contributions of their woman partners. Fortunately, in this research, women, but also men, were just as possessing empowering features and as performing empowering behavior. This view was true of both males and female subordinates. But, the capacity to be inspiring varies with status, or not enough females have hit the peak yet. Women must always be introduced

into high leadership roles, in politics, industry, psychological groups, or academia. It becomes even more crucial that these females be feminists. Women may empower someone else, but only modern feminists can progress our feminist agenda as well as leadership with some other feminists.

4. CONCLUSION

The Women's Leadership Program was created to assist women in becoming more influential and successful leaders. The curriculum is thoughtfully designed to address the particular hurdles that women confront on their road to leadership. Finally, if given the opportunity, women have shown their immense power to alter civilizations. Their involvement in peace or security, but also development, guarantee that we achieve more effective but also long-term outcomes, with benefits disseminated across their communities. People must address gender equality and women's empowerment concerns in the context of all the intersectionality's of disadvantages that women facewomen living in poverty, in rural areas or urban slums, in tradition-bound societies that misinterpret religion or customs to rationalize denying people their equal rights from across the board, including such their rights to learning, work, assets, participation in politics, and lea as part of the topic of leaving no one behind. People have come to respect and support them in their endeavors.

REFERENCES

[1] F. L. De Nmark, "Women, Leadership and Empowerment," *Psychol. Women Q.*, 1993, doi: 10.1111/j.1471-6402.1993.tb00491.x.

[2] N. Shaya and R. Abu Khait, "Feminizing leadership in the Middle East: Emirati women empowerment and leadership style," *Gend. Manag.*, 2017, doi: 10.1108/GM-07-2016-0143.

[3] L. Prager, "Emirati Women Leaders in the Cultural Sector: From 'state Feminism' to Empowerment?," *Hawwa*, 2020, doi: 10.1163/15692086-12341370.

[4] R. Sudarmanti, S. Van Bauwel, and C. Longman, "Women's empowerment: Examining leadership communication of women entrepreneurs in indonesia and the USA," *J. Komun. Malaysian J. Commun.*, 2015, doi: 10.17576/jkmjc-2015-3101-08.

[5] T. Shapira, K. Arar, and F. Azaiza, "Arab women principals' empowerment and leadership in Israel," *J. Educ. Adm.*, 2010, doi: 10.1108/09578231011079566.

[6] R. Bernacki *et al.*, "Women in Leadership: Pathways for Empowerment, Leadership, Action and Culture Change (CAMBIA)," *J. Pain Symptom Manage.*, 2019, doi: 10.1016/j.jpainsymman.2018.12.178.

[7] A. Moodly and N. Toni, "Intrinsic and Extrinsic Factors in Empowerment of Women Towards Leadership: A Study in Higher Education (South Africa)," *Proc. 2Nd Int. Conf. Gend. Res. (Icgr 2019)*, 2019.

[8] R. M. Pinto, R. Rahman, and A. Williams, "Policy advocacy and leadership training for formerly incarcerated women: An empowerment evaluation of ReConnect, a program of the Women in Prison Project, Correctional Association of New York," *Eval. Program Plann.*, 2014, doi: 10.1016/j.evalprogplan.2014.07.005.

[9] S. Alkire, R. Meinzen-Dick, A. Peterman, A. Quisumbing, G. Seymour, and A. Vaz, "The Women's Empowerment in Agriculture Index," *World Dev.*, 2013, doi: 10.1016/j.worlddev.2013.06.007.

[10] A. Yameen, N. Kamal, And H. Samdani, "Road to Women Empowerment in Cambodia; A Leadership and Education approach," *Int. Rev. Manag. Bus. Res.*, 2020, doi: 10.30543/9-3(2020)-6.

[11] M. Arora and S. Singh, "Microfinance, women empowerment, and transformational leadership: A study of Himachal Pradesh," *Int. J. Leadersh.*, 2018.

[12] L. M. Barrios, A. Prowse, and V. R. Vargas, "Sustainable development and women's leadership: A participatory exploration of capabilities in Colombian Caribbean fisher communities," *J. Clean. Prod.*, 2020, doi: 10.1016/j.jclepro.2020.121277.

[13] B. Shockley, N. A. Lari, E. A. A. El-Maghraby, and M. H. Al-Ansari, "Social media usage and support for women in community leadership: Evidence from Qatar," *Womens. Stud. Int. Forum*, 2020, doi: 10.1016/j.wsif.2020.102374.

[14] H. Al-Ahmadi, "Challenges facing women leaders in Saudi Arabia," *Hum. Resour. Dev. Int.*, 2011, doi: 10.1080/13678868.2011.558311.

[15] H. Alaofè, M. Zhu, J. Burney, R. Naylor, and T. Douglas, "Association Between Women's Empowerment and Maternal and Child Nutrition in Kalalé District of Northern Benin," *Food Nutr. Bull.*, 2017, doi: 10.1177/0379572117704318.

[16] B. Ronald, "Comprehensive leadership review – literature, theories and tesearch," *Adv. Manag.*, vol. 7, no. 5, pp. 52–67, 2014.

[17] J. Francis East and S. J. Roll, "Women, Poverty, and Trauma: An Empowerment Practice Approach," *Soc. Work (United States)*, vol. 60, no. 4, pp. 279–286, 2015, doi: 10.1093/sw/swv030.

[18] E. Daniëls, A. Hondeghem, and F. Dochy, "A review on leadership and leadership development in educational settings," *Educ. Res. Rev.*, vol. 27, no. March, pp. 110–125, 2019, doi: 10.1016/j.edurev.2019.02.003.

CHAPTER 2

CHALLENGES FACED BY ONLINE EDUCATION DUE TO COVID-19

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ABSTRACT:The practice of gaining skills and knowledge through the internet using electronic equipment like as computers, cell phones, and computers is known as online education. Purpose of this paper is to discovery the challenges faced in online education due to COVID-19. In this research data is collected and analysis based on the two short survey one for teachers and one for students. According to finding, maximum numbers of student and teachers faced problem in using skype and zoom respectively, attendance of students is very low in online classes, maximum number of teachers have faced problem in online education is required more time to prepare course content, maximum number of students have faced problem in online education is internet connectivity and maximum number of teachers and students have faced problem in teaching and understand numeric subject respectively. As a future point of view this research will help to identify the challenges faced by online education due to COVID-19.

KEYWORDS: COVID-19, Online Education, Technical Issues, Pandemic, Students.

1. INTRODUCTION

Technology has play a larger position in current time globe when it originates to the schooling organization, with the advancement in the new era, the practice of learning or attaining information, skills, attitudes, beliefs, and habits, method has been worried in the core of the schooling scheme; moreover, Things have transformed in the manner they utilized to be when it came to the nation's education program following the Covid-19 epidemic [1]. As a result, with the emergence of the pandemic, technology reliance has become necessary, and the shift to a digitization system has been expedited. Developments in universities and organizations have now been pushed to digital classroom and similar venues that are used to track individuals' educational progress [2]. It's worth noting that schools and universities have figured out how to interact with kids at home[3].

Online schooling is a cutting-edge instrument. It's essentially a computer application. Career classes are offered partially or entirely through the Internet, an intranet, or an extranet in this education[4]. The online education area is only a stepping stone to a prosperous career. Whether learners have just finished from high school, are coming to college after a couple years in the workforce, or just desire to continue their study while working full-time, India academic is a fantastic place to start looking at their educational possibilities [5]. They may get an internet education at numerous levels, comprising associate degrees, master's degrees, bachelor's degrees, and even a PhD [6].

1.1 Problem faced in online education:

- *Adaptability difficulties in Online Learning:*

Students have a hard time adjusting to the online education atmosphere after spending time in a conventional classroom [7]. Pupils who have traditionally studied in a old-style classroom atmosphere find it tough to focus on both online and traditional venues at the similar time. It is vital that students embrace the new instructional environment with enthusiasm [8].

- *Online Learning's Technical Issues:*

Many students may be unable to obtain a high online connection, which is required for virtual instruction. As a consequence, they're having trouble developing virtual schooling and other

services that want access to the web[9]. Since they are inexperienced with technology and computer applications, they encounter technological issues in online classes. If your broadband connection is fast or slow, it may impact how rapidly you can attend the course and prevent skipping any live meetings [10].

- *Time management issue:*

Many learners battle to organize their time when it relates to internet knowledge. For countless folks, online education is a totally new experience that demands a substantial amount of effort. To properly organize their hours, they want a time administration calendar[11]. Unlike traditional classes, online learning gives you greater scheduling freedom. Some individuals, however, struggle to adjust to the time investment required for online study.[12].

- *Lack of computer knowledge:*

In today's world, a shortage of computing skills is a major concern. Many kid are still incapable to utilise basic processer programmes like Microsoft Word and PowerPoint[8]. When technical problems grow, individuals often find it difficult to tackle the problem. Live classes, correct icon use, MS Office, interaction programmes and webpages, and surfing study resources are just a few of the issues they face. As indicated in Figure 1, they could be unaccustomed with technical skills like logging in, watching live classes, producing and sharing work, and interacting with instructors and classmates.

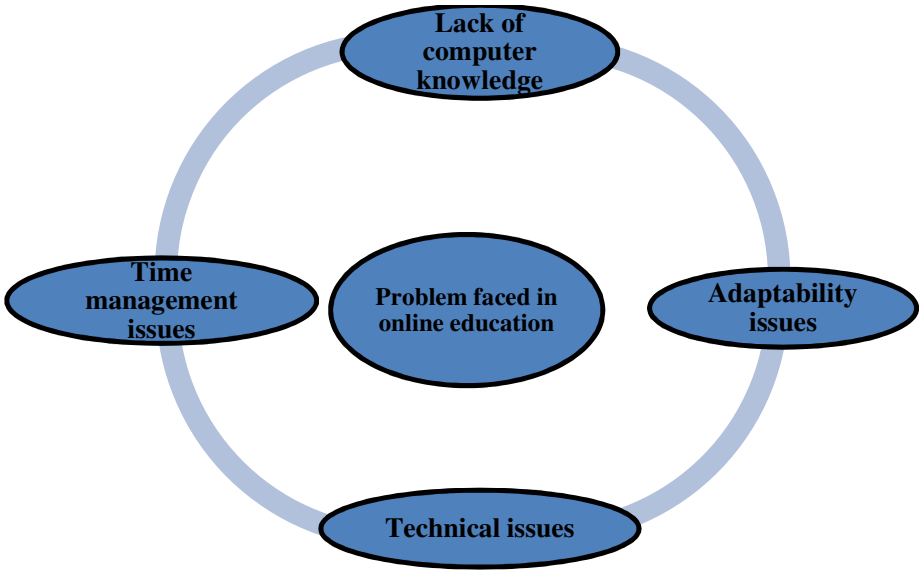

Figure 1: Illustrating the problem faced in online education which generally includes lack of computer knowledge, time management issues, technical issues and adaptability issues.

2. LITERATURE REVIEW

M. Goswami and C. Pollak stated that online education is one of the important alteration of teaching system in India during lockdown. Author was try to examine students, teachers and parents views on online teaching. This research were performed by an online survey over Google Forms and it were spread via a social media. The author discovered various flaws in

the online learning system as well as several advantages of offline or classroom instruction[13].

R. M. Simamora Mentioned the difficulty faced by pupils and tutors in online education during COVID-19. Platform Data was collected from students who exchange their opinions or viewpoints on virtual learning throughout the COVID-19 pandemic via the "WhatsApp" application. Finding show that Zoom, WebEx, Google Meet, Google Form, WhatsApp, YouTube, and other online teaching and learning technologies are extremely beneficial to students [14].

Adalya J stated the positive and negative effect of COVID-19 on student during the online learning system and steps taken by government. The data and information used in this research was gathered from a variety of national and international sources on the COVID-19 epidemic. Finding of the research show that COVID-19 had a noteworthy effect on India's education industry. It has created a lot of difficulties, but it has also created a lot of opportunities [15].

After analyzing few related studies regarding to challenges faced by online education in Delhi due to COVID-19, author conclude that maximum number of teachers have faced problem in online education is required more time to prepare course content and maximum number of students have faced problem in online education is internet connectivity.

Research Questions:

1. What types of challenges tackled by students and teachers in online education?
2. How to resolve problem that occur in online classes?

3. METHODOLOGY

3.1 Research design:

This research carried out in Delhi on challenges faced by online education due to COVID-19 in step by step way as shown in Figure 2. This research based on two short survey one for teachers and other for students. Several questions was asked to respondents to provide relevant information.

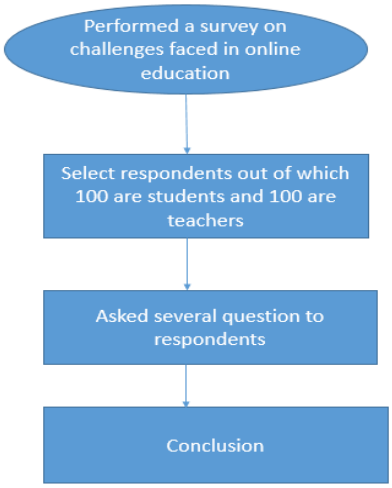

Figure 2: Illustrating the step by step procedure of research which includes 4 steps.

3.2 Sampling:

In this research samples are taken from 200 respondents out of which 100 respondents are students and 100 students are teachers. Out of 100 students, 42 students were between age group of 5-10 years, 37 students were between age group of 10-15 years and 21 students were between age group of 15-20 year as shown in Figure 3.

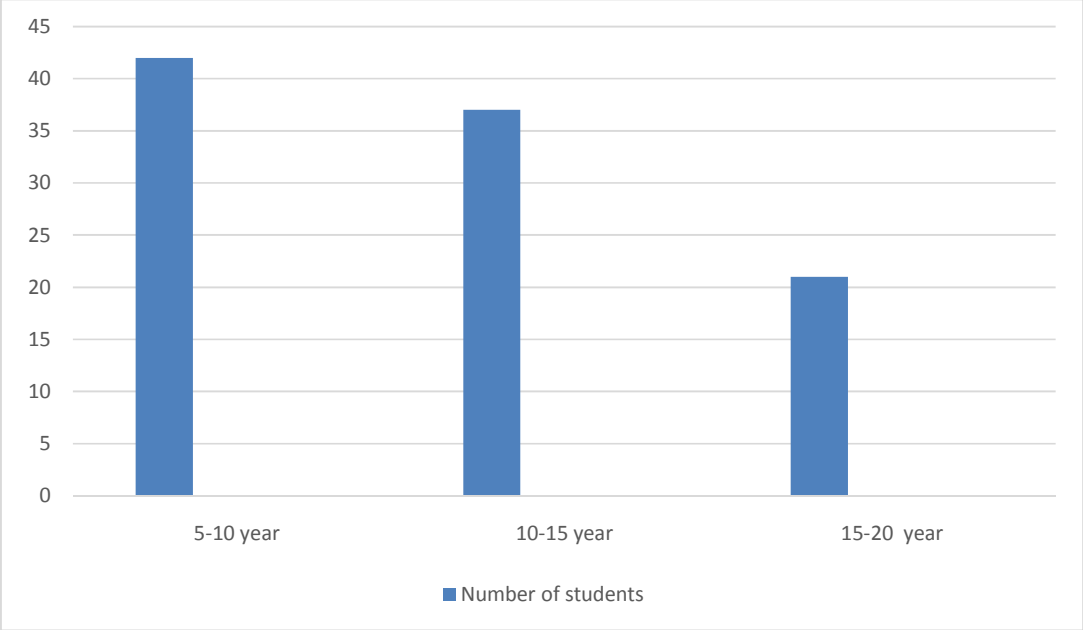

Figure 3: Illustrating the number of students with respect to age group who participate in the research.

The numbers of teachers with respect to age group of teachers who participate in this research is shown in Figure 4. Out of 100 teachers, 19 teachers were between age group of 25-35 year, 27 teachers were between age group of 35-45 year, 34 teachers were between age group of 45-55 year and 20 teachers were between age group of 55-65 year.

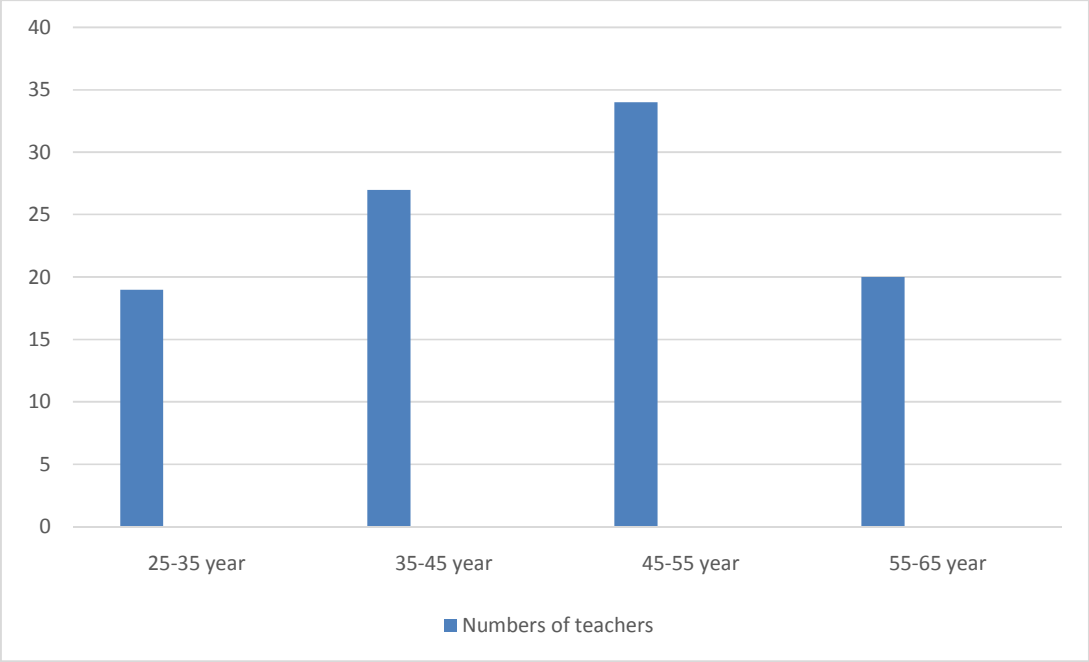

Figure 4: Illustrating the numbers of teachers with respect to age group who participate in the study

3.3 Instrument used:

Statistical techniques would be used through the investigation process, depending on the accessibility of information and the demands of the investigation. Average, percent, connection, chi-square test, and t-test are a few examples. The outcomes of the research will be shown using graphs, charts, and tables. To help in the explanation of the study and the mapping of the graph, certain questions have been presented in Table 1 shows the list of questions.

1. Does students and teachers faced technical problem?
2. Does students and teachers faced infrastructure problem?
3. Does students and teachers faced internet connectivity problem?
4. Does teachers faced problem to teach numeric subjects?
5. Does students faced problem to understand the numeric subject?
6. Does teacher faced problem to track the progress of numeric subject?
7. Does students and teachers faced problem in the platform like Zoom, Skype, google meet?

Table 1: Illustrating the list of questions asked related to challenges faced by pupils and tutors in online education during this research.

Question asked	Yes	NO	In the developing stage
Does students and teachers faced technical problem?	35%	45%	20%
Does students and teachers faced infrastructure problem?	65%	25%	10%
Does students and teachers faced internet connectivity problem?	68%	23%	9%
Does teachers faced problem to teach numeric subjects?	53%	33%	14%
Does students faced problem to understand the numeric subject?	68%	17%	15%
Does teacher faced problem to track the progress of numeric subject?	74%	11%	15%
Does students and teachers faced problem in platform like Zoom, Skype, google meet etc?	67%	19%	14%

3.4 Data collection:

Figure 5 show the types problem faced by students in online classes which show that out of 100 students, 37 were faced problem in online education between age group of 5-10 years, 29

students were faced problem in online education between age group of 10-15 years and 34 students were faced problem in online education between age group of 15 -20 year.

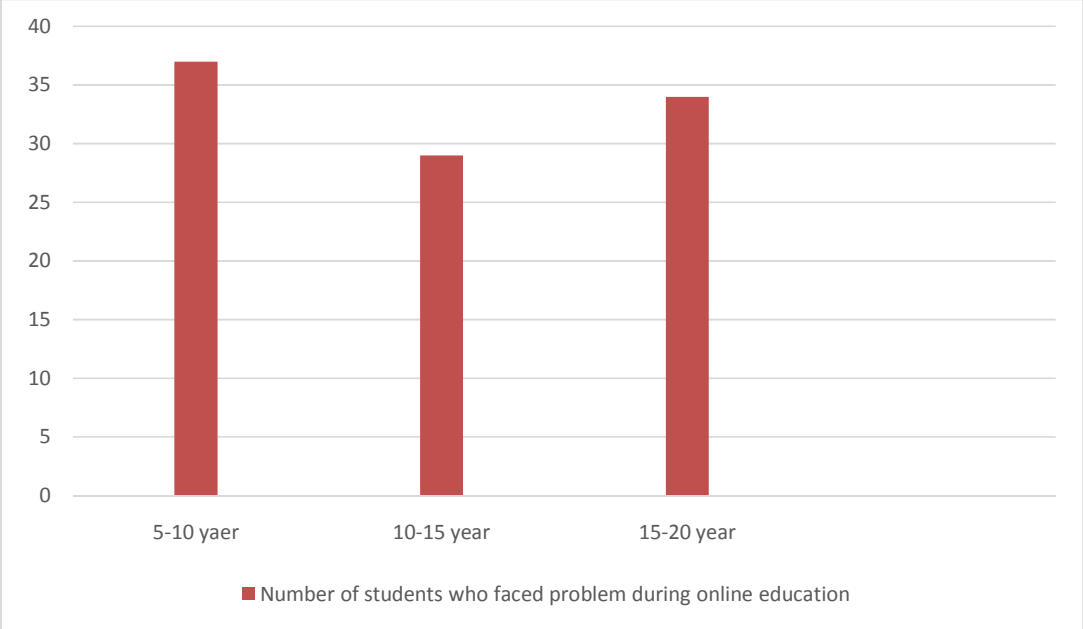

Figure 5: Illustrating the types of problems faced by students in online classes with respect to age group

3.5 Data analysis:

Figure 6 shown that 14 students and 5 teachers have faced lack of motivation problem in online education, 20 students and 9 teachers have faced problem in infrastructure problem, 10 students and 7 teachers have faced technical issues, 15 students and 12 teachers have faced problem in lack of information, 22 teachers have faced problem in difficult to tech numeric subject, 32 teachers have faced problem is required more time in preparing course contents, 26 students and 10 teachers have faced problem in internet connectivity, 13 teachers have faced problem in trace the students' progress and 15 students have faced problem in difficulty to teach numeric subject.

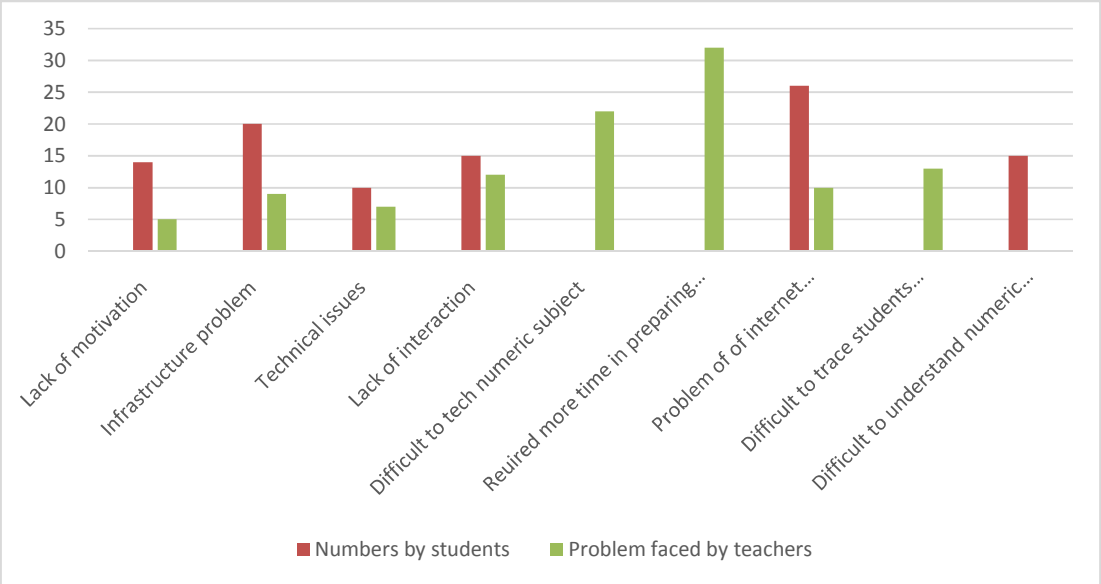

Figure 6: Illustrating the types of difficulties faced by pupils and educators during online education

4. RESULT AND DISCUSSION

This research will help to understand the challenges faced by pupils and educators in online education due to COVID -19. In this research 200 respondents take participate out of which 100 are students and 100 are teachers. In this research several questions asked to the respondents, the result of these question are shown in the Table 2 and Figure 7.Table 2 show that 17 students and 14 teachers have faced problem in google classroom, 16 students and 19 teachers have faced problem in zoom, 22 students and 15 teachers have faced problem in Skype, 10 students and 7 teachers have faced problem in YouTube, 15 students and 19 teachers have faced problem in WebEx, 13 students and 16 teachers have faced problem in google meet, 7 students and 10 teachers have faced problem in whatsApp.

Table 2: Illustrating the problem faced by students and teachers in using online platform.

Platform used	Problem faced by students	Problem faced by teachers
Google classroom	17	14
Zoom	16	19
Skype	22	15
YouTube	10	7
WebEx	15	19
Google meet	13	16
Whatsapp	7	10

Many teachers noticed that attendance of students is very low in online classes as shown in Figure. 23 students have attendance between 30-40%, 26 students have attendance between 40-50%, 22 students have attendance between 50-60%, 19 students have attendance between 60-70% and 10 students have attendance more than 70% as shown in Figure 7.

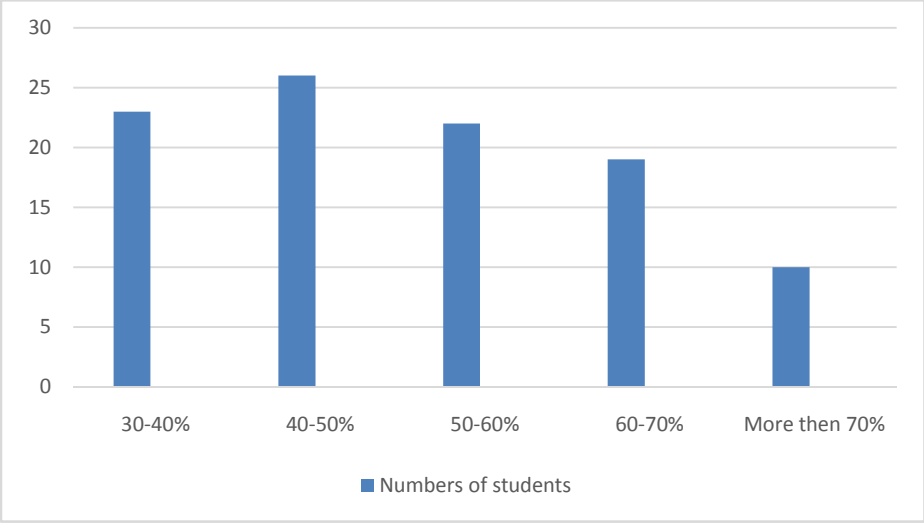

Figure 7: Illustrating the numbers of students who can attend the online classes

5. CONCLUSION

This research is carried out by taking into account several factors to provide a comprehensive image of challenged faced in online classes by students and teachers. According to finding out of 200 respondents (100 students, 100 teachers) 14 students and 5 teachers have faced lack of motivation problem in online education, 20 students and 9 teachers have faced problem in infrastructure problem, 10 students and 7 teachers have faced technical issues, 15 students and 12 teachers have faced problem in lack of information, 22 teachers have faced problem in difficult to tech numeric subject, 32 teachers have faced problem in required more time in preparing course contents, 26 students and 10 teachers have faced problem in internet connectivity, 13 teachers have faced problem in trace the students' progress and 15 students have faced problem in difficulty to teach numeric subject and many teachers faced that attendances of students have very low in online classes.

REFERENCES

CHAPTER 3

QUALITY REVOLUTION IN HIGHER EDUCATION SYSTEM FOR MAKING THE BETTER EDUCATION SYSTEM

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ABSTRACT: ***The education system must be set up at a very excellent level of quality in order to function properly. A quality system consists of a set of organizational structures, responsibilities, processes, and management capabilities that work together to achieve quality-oriented economic efficiency. It cannot be denied that the level of education has had a significant impact on the prosperity or suffering of nations throughout history. With a wide number of different skills and a superior capacity for training, one can look forward to the next life of great economic bliss. The secondary school years are a rapidly developing economy, and education systems are faced with the task of competing or even surviving in this competitive market. Since the education sector, especially higher education, is a component of the overall hospitality industry, a firm framework must be created to provide high-quality services. With the growing expansion of the country's higher education industry with us, with increased national and worldwide competitors, the need to educate students and employable people for our undergraduate and postgraduates have taken on new importance. The primary objective of this research is to examine the functions of various important regulatory authorities and implementing boards in the higher education sector of India. In the future, this research will inform other scientists about the changes taking place in the school education institutions of India as well as its advantages and disadvantages.***

KEYWORDS: ***Distance Education, Higher Education, Educational Institutions, Quality Revolution, Teaching.***

1. INTRODUCTION

Due to globalization and technological development, nowadays competition is widespread in every industry. Only those organizations survive in this market that provide the best services to their users. Attracting customers to regions is becoming incredibly difficult because they now have so many options [1]. They must guarantee the cleanliness of their products or services to maintain their market share of product performance and durability [2]. As a result, the definition of perceived has evolved into a manifestly important one that every enterprise is hoping to make today. Consequently, in its ability to provide excellent service to its consumers, a company must have a thorough understanding of consumer behavior and satisfaction.

Education, commerce, and service companies such as the medical, hotel, and transportation sectors, are developing significantly within this broader Indian economy [3]. As a result, operational quality has become an important element of the strategic plans of all developed corporations. The project is aimed at quality educational businesses, primarily higher education institutions, and their position within India. Teaching and learning are seen as a charitable service as is considered for the satisfaction and economic development of the developing country. Traditional Indian education is a marvel of something like the Indian mind centered on the Vedas, Puranas, Ayurveda, and Arthashastra, among many other texts. In ancient India, Taxila, Vikramshil,a and Nalanda have been one of the most important universities [4].

Technical training includes many things for diverse people in a society full of diversity, ideas, and opinions. Diversity of perspectives is inevitable, and some argue that it should be. University education refers to college and university education that leads to professional

educational degrees [5]. Higher education fosters a deeper understanding and understanding to motivate learners to transform knowledge across multiplefieldss subjects. It's about learning a lot about less and less. Higher education can improve a student's ability to reason and seek truth along with their ability to evaluate specific complaints [6].

Now more than ever in human history, the academic performance of students determines the wealth or poverty of the government. Quality education have major pillar which is mentioned in Figure 1 and if someone with a large skill set and superior learning ability can look forward to exceptional profitability over the next lifetime. However, over the next decades, weak-minded people will have no choice but to live a life of deep despair [7].

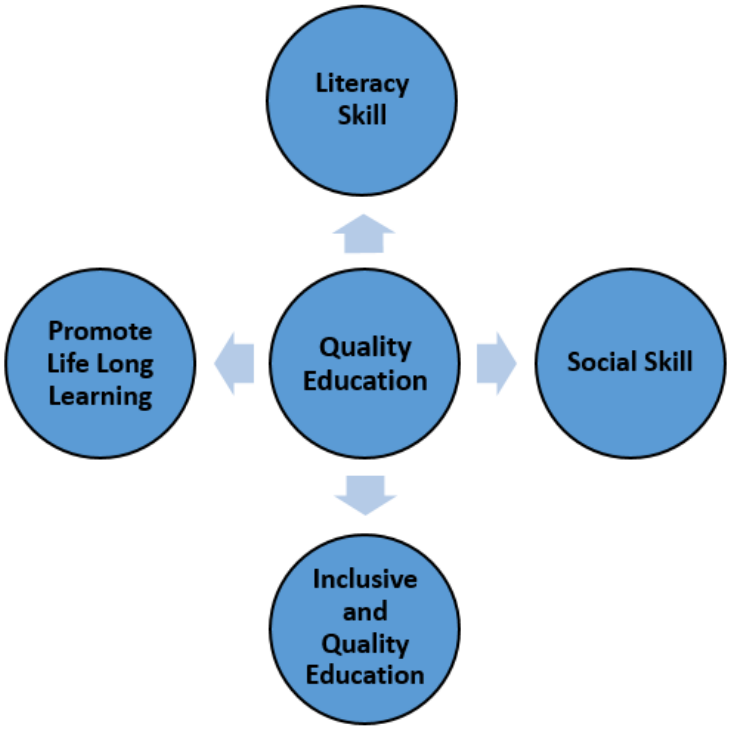

Figure 1: Illustrates the Four Major Pillar of the Quality Education

1.1. The Importance of Higher Education in Society:

Higher education is mainly concerned with teaching, research, and outreach. If we make an objective study of the various concepts of higher education, we can enumerate the many functions of university education in society [8]. University education serves as a source or feeding system for people at every stage of life, providing much-needed human resource management in areas including administration, planning, design, teaching, and research. The progress of a country's science and technology, but also its economic success, all depend on its university system [9]. Our world-class higher education helps us to develop indigenous innovation and capability in agriculture, food security, and some other industrial sectors [10].

University education allows employees to learn throughout their lives, allowing them to refresh their understanding and skills as societal demands change. Following are the responsibilities of the universities as mentioned by the Indian Commission:

- To seek and nurture new knowledge, to participate zealously and fearlessly in the search for truth, and to interpret past knowledge and understanding in the light of new demands as well as discoveries [6];

- Providing appropriate leadership in all aspects of life, helping to identify outstanding people and helping them achieve goals through physical health, intellectual development, and the cultivation of acceptable interests, attitudes, and spiritual and moral values;
- To give to the society cultured citizens with a sense of social responsibility along with talented men and women trained in agriculture, art, medicine, scientific and technical, and many other professions [11];
- Make a concerted effort to eliminate social and cultural inequalities through school that is accessible and relevant and common with peers; And
- Incorporating the beliefs and assumptions necessary to build a "good life" in teachers and students, as well as people in the wider society and the world.

2. LITERATURE REVIEW

The author R. Ubogu [12] illustrates that the paper which was designed to respond and the need to re-establish the importance of intellectual education in the country focuses on the relevance of teacher development in providing quality education for a democratic nation. The study employed research issues, both of which are assessed using the mean, as well as correlation metrics and t-test statistics to investigate the following suggestions. When academics are considered a reference point as information custodians and custodians, the authors of the study's findings suggest that teacher education would benefit the educational elite in Indian society. It was also demonstrated that there is a statistical relationship between academic development and higher educational background as well as a happier community. It found that the schooling system may be a means to achieve academic goals, but is a means to improve and involve a creative and functioning society. Governments, and policymakers, including education professionals, should establish a feedback process to ensure that learning methods are of standard quality for developing teachers, according to scholars.

A. Renta-Davids [13] states that Higher education institutions have been established with sustainability concepts. Sustainability should be included in higher education, according to Spanish colleges, in hopes of complementing the education of socially responsible professionals. The data was taken through a quick questionnaire and is being analyzed using statistical techniques. The findings suggest that most of the concerns affecting sustainable development are well known and that the university's own goals and curriculum stand out as factors that advance students' understanding levels. The research also highlights the empirical implications of applying the vignette approach to measuring participants' attention.

O. Bululukov et al. [14] discussed There has always been a need to support and expect excellent education to meet the taste of its creation, production, and presence in the field of education, but this can only be accomplished by evaluating its core idea and defined protocols. The need for essays and research was understood in this street. Recognize the inevitable need for the development of a trustworthy and honest educational facility accreditation authorities as well as an independent education evaluation institution based on empirical review and evaluation. The essay focuses on the beliefs and practices of effective higher education. Based on the assessment of professional attitudes, some authors suggest their definitions of phrases such as "standard of education" and "method of assessing quality". The types of measurement of teaching standards, as well as their methodological forms, are classified. Scientists offer a proposals to overhaul the country's economic certification program.

Research Question

- To assess the current status of higher education in India and the problems faced by it in terms of quality.
- To research India's primary regulatory agencies and quality regulatory bodies.

3. METHODOLOGY

3.1.Design:

The researchers provide us with a summary of the rapid development of the country's economic higher education industry. The importance of educating students and teachers as well as employable professionals has increased. The research looked at over 900 colleges in 14 states and over 20 institutions in India. The basic goal of this study is to look at the year-on-year growth of universities in India's higher education system as well as the board's initiatives to execute it.

3.2. Data Sample and Instrument:

In this section, the researcher uses different sources as an instrument to collect the data for this research. The researcher uses different sources such as newspaper, articles, blogs, different websites, and television and in this section, the researcher displays the data as a sample which is mentioned in Table 1. This table it displays the increasing the no. of colleges from 2012 to 2019. According to this table it displays there is 25921 colleges are available in 2012-13 and after that in 2013-14 the no. of the colleges in India is 27916, in 2014-15 the no. of the colleges in India is 34452, after that in 2015-16 the no. of the colleges in India is 38498, in 2016-17 the no. of the colleges in India is 39071, in 2017-18 there is the no. of the college in India is 40026 and at last, in 2018-19 there is 39050 colleges are available in India.

Table 1: This Table Show That the Data on Increasing the No. of College in India Yearly.

Sr. No.	Years	Increase Colleges (%)
1.	2012-13	25921
2.	2013-14	27916
3.	2014-15	34452
4.	2015-16	38498
5.	2016-17	39071
6.	2017-18	40026
7.	2018-19	39050

3.3.Data Collection:

In this section, the researcher collects the data for this research, which is mentioned in Table 2. This table it displays the increasing the no. of universities from 2012 to 2019. According to this table it displays there is 723 universities are available in 2012-13 and after that, in 2013-14 the no. of the universities in India is 760, in 2014-15 the no. of the universities in India is 799, after that in 2015-16 the no. of the universes in India is 864, in 2016-17 the no. of the

colleges in India is 903, in 2017-18 there is the no. of the college in India is 993 and at last, in 2018-19 there is 1043 colleges are available in India.

Table 2: This Table Show That the Data on Increasing the No. of Universities in India Yearly

Sr. No.	Years	Increase Universities (%)
1.	2012-13	723
2.	2013-14	760
3.	2014-15	799
4.	2015-16	864
5.	2016-17	903
6.	2017-18	993
7.	2018-19	1043

3.4.Data Analysis:

The researcher displays the data analysis in a tabular form which is mentioned in Table 3. This table, it displays the increasing the no. of institutions from 2012 to 2019. According to this table, it displays there is 25921 institutions are available in 2012-13 and after that, in 2013-14 the increase rate is 7.5%, in 2014-15 the increasing rate is 20.415, after that in 2015-16 the increase rate is 11.74%, in 2016-17 the increasing rate is 1.48%, in 2017-18 the increasing rate is 2.44% and at last in 2018-19 the increasing rate is 2.43%.

Table 3: This Table Show That the Data on Increasing the No. of College in India Yearly

Sr. No.	Years	Increase Institutions (%)
1.	2012-13	25921
2.	2013-14	7.5%
3.	2014-15	20.41%
4.	2015-16	11.74%
5.	2016-17	1.48%
6.	2017-18	2.44%

4. RESULT AND DISCUSSION

It is undeniable that the quality of teaching has had such a significant impact on the richness or suffering of nations throughout historical [7]. With a broader range of talents and then a better capacity for learning, some may look forward to a lifespan of spectacular economic joy.

Growth and commercialization are a rapidly evolving business, and private colleges are faced with the task of leading or surviving in this competitive environment, s shown in Figure 2.

Since the education sector, especially higher education, is a component of the total service sector, a strong foundation must be built to provide maximum service. With the increasing expansion of our country's higher education industry and the increasing national and worldwide competition, educating the students and employability of our graduates, including post-graduation, has taken on new importance [15].

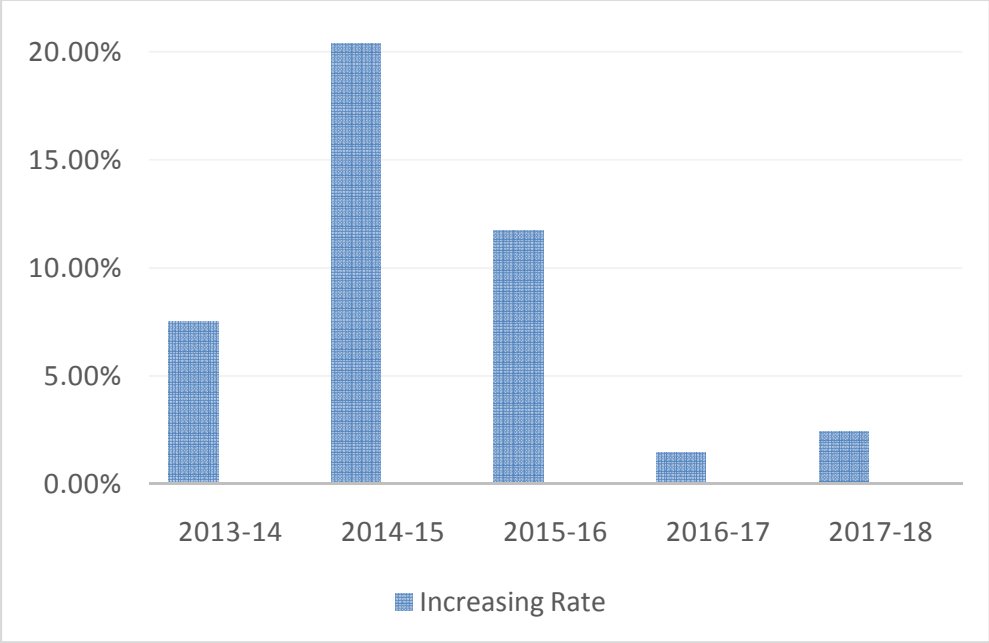

Figure 2: Illustrates the percentage of increasing colleges from 2013 to 2018.

Compared to other professions, the primary barriers to finding talent in university education are numerous and they are challenging to overcome. The study focuses on the recent state of the higher education system as well as the issues and challenges it faces in terms of quality. The primary goal of this research is to examine the functioning of various important regulatory bodies and tools for representing boards in India's higher education sector [16]. This investigation was carried out using existing literature as well as administrative, analytical, and complementary sources.

5. CONCLUSION

India's education system has experienced many hurdles in the century since independence. Many good ideas are being implemented in the education sector of India from different perspectives. University Grants Commission (UGC), All India Council for Technical Education (AICTE), Quality Council of India (QCI), Distance Education Council (DEC), and Bar Council of India (BCI) have all worked hard. Improving the educational performance of the country and linking India's school curriculum to the commitments made. Our ability to create and sustain a high-quality higher education sector, and therefore the future of our society, is intrinsically linked. If Indian intellectual universities and colleges get adequate recognition and funding, power has the potential to expand the boundaries of knowledge in all fields. Overall, academic technology has had a profound impact on the current Indian educational system in many ways, such as the benefits of better accessibility, educational software, study flexibility, cost-effective learning, and self-directed learning. Even though this non-formal form of learning has some disadvantages, such as lack of co-curricular activities, peer learning, waiting for study guides, and the inability to provide distance classes

in fields such as science, and construction. And technology, online learning can be rationalized.

REFERENCES

[1] A. Z. Bhat, V. R. Naidu, and B. Singh, "Multimedia Cloud for Higher Education Establishments: A Reflection," 2019. DOI: 10.1007/978-981-13-2285-3_81.

[2] S. K. Mishra, N. Garud, and R. Singh, "Development and evaluation of mucoadhesive buccal patches of flurbiprofen," *Acta Pol. Pharm. - Drug Res.*, 2011.

[3] M. K. Gupta, R. K. Khanna, K. J. Rangra, and Y. K. Vijay, "Interaction of cell phone radiations and human nervous system," 2018. doi: 10.1007/978-981-10-5520-1_38.

[4] P. S. Matreja, J. Kaur, and L. Yadav, "Acceptability of the use of crossword puzzles as an assessment method in pharmacology," *J. Adv. Med. Educ. Prof.*, 2021, doi: 10.30476/jamp.2021.90517.1413.

[5] V. Jain and R. Singh, "Development and characterization of eudragit RS 100 loaded microsponges and its colonic delivery using natural polysaccharides," *Acta Pol. Pharm. - Drug Res.*, 2010, doi: 10.1038/npre.2009.3676.2.

[6] J. Rai, R. C. Tripathi, and N. Gulati, "A comparative study of implementing innovation in education sector due to COVID-19," 2020. doi: 10.1109/SMART50582.2020.9337148.

[7] M. M. Gupta, S. Jankie, S. S. Pancholi, D. Talukdar, P. K. Sahu, and B. Sa, "Asynchronous environment assessment: A pertinent option for medical and allied health profession education during the covid-19 pandemic," *Education Sciences*. 2020. doi: 10.3390/educsci10120352.

[8] V. Sharma, S. Sharma, O. P. Verma, B. Bhardwaj, T. K. Sharma, and N. Pachauri, "Prediction and optimization of abrasive wear loss of ultrahigh strength martensitic steel using response surface methodology, Harris Hawk and artificial neural network," *Int. J. Syst. Assur. Eng. Manag.*, 2021, doi: 10.1007/s13198-021-01160-5.

[9] S. Shukla, A. Lakhmani, and A. K. Agarwal, "A review on integrating ICT based education system in rural areas in India," 2017. doi: 10.1109/SYSMART.2016.7894531.

[10] A. Kumar, R. K. Jain, P. Yadav, R. N. Chakraborty, B. K. Singh, and B. K. Nayak, "Effect of gamma irradiation on the etching properties of Lexan and Makrofol-DE polycarbonate plastics," *J. Radioanal. Nucl. Chem.*, 2013, doi: 10.1007/s10967-012-1830-y.

[11] D. J. Bhaskar, D. S. Aruna, G. Rajesh, M. Suganna, and M. Suvarna, "Emotional intelligence of Pedodontics and Preventive Dentistry postgraduate students in India," *Eur. J. Dent. Educ.*, 2013, doi: 10.1111/j.1600-0579.2012.00750.x.

[12] R. Ubogu, "The role of teacher education in improving quality education for a functional society," *J. Educ. Soc. Res.*, 2020, doi: 10.36941/jesr-2020-0028.

[13] A. I. Renta-Davids, M. Camarero-Figuerola, and J. M. Tierno-García, "Assessment of the quality education awareness competence of pre-service educators using vignettes," *Sustain.*, 2020, doi: 10.3390/su122310203.

[14] A. Verma, A. Singh, E. Lughofer, X. Cheng, and K. Abualsaud, "Multilayered-quality education ecosystem (MQEE): an intelligent education modal for sustainable quality education," *J. Comput. High. Educ.*, 2021, doi: 10.1007/s12528-021-09291-1.

[15] D. W. Wilson *et al.*, "Perspectives of Human development: Time, Space, and Chrononutrition," *Open Nutraceuticals J.*, 2012, doi: 10.2174/1876396001205010066.

[16] U. K. Jain, R. K. Bhatia, A. R. Rao, R. Singh, A. K. Saxena, and I. Sehar, "Design and development of halogenated chalcone derivatives as potential anticancer agents," *Trop. J. Pharm. Res.*, 2014, doi: 10.4314/tjpr.v13i1.11.

CHAPTER 4

COMPARATIVE STUDY OF EDUCATION SYSTEMS IN RURAL AND URBAN AREAS OF INDIA

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ABSTRACT:Education system in rural areas has seen many adjustments and changes but at present, changes and progress have taken place in the rural education system. However, many changes are still needed, but it is not in line with the urban education system, and as a result of changes in the education system in rural areas, rural communities are better equipped to understand the importance of education and sustain their livelihood. In this paper, the authors conduct online surveys based on the status of the education system in rural and urban areas and according to the result, the researcher found that according to the survey, 80% of the respondents say that there is a lack of resources. In rural areas, 85% of respondents lack quality teachers, 65% lack transport facilities and 96% of respondents in urban areas have a better education than in rural education systems. The main objective of this paper is to get more information about the status of the education system in India in rural or urban areas. In the future, this paper helps to understand the condition of the education system in India in rural or urban areas.

KEYWORDS:Government, Education System, Rural Area, Student, Urban Area.

1. INTRODUCTION

The contribution of education to social or economic advancement is widely acknowledged and education is important to gain access to new options that can help increase economic progress. Keeping this in mind, since the independence of the country, the emphasis has been on education, and however, ensuring proper education in rural India has become one of the biggest concerns of the government. India saw education as the most effective means of bringing about social change but soon after the country gained independence in 1947, education became a priority for governments [1]–[3].

Certain aspects affect the success of the educational system in rural areas and include increased demand for higher quality education for rural households and children. They are aware of what happened in the developing parts of the country, which is why they appreciate the importance of education or express their desire to educate their children. The education system in rural areas must be at par with the education system in metropolitan areas. In rural areas, schools or training centers have been established, which have increased the living conditions of the people [4].

1.1.The rural education scenario in India:

There is no doubt that education plays an important role in molding the personality of an individual. According to a survey India's organized industry employs only 35 million people, which is a very small percentage of the entire population and this sentence alone tells a lot about India's literacy rate and education system. Even though India's literacy level has increased in recent years, it has not been able to provide the kind of education that is needed in the present times. The Indian education system is grappling with many difficulties, the most serious of which is the dismal state of rural education [5]–[7].

1.1.1. Lack of an adequate number of schools:

India's rural areas are already struggling when it comes to local transport, and because there are few or no schools in the region, the situation poses a serious threat to rural Indian

education. Due to transportation issues and schools located far away in rural areas, parents are unable to drop their children to school without education.

1.1.2. Lack of Affordable Educational Institutions:

People in rural India usually have very little financial resources, usually spent on basic survival, making education out of reach. Because there are no government schools in the area, parents are less likely to spend money on their children, resulting in no education provided.

1.1.3. Inadequate infrastructure:

India's school structure is staggering and there exists a severe shortage of instructors, especially well-trained teachers, which has a substantial impact on the student-teacher ratio. As a result, the education provided is of poor quality and only meets the educational demands of the students.

1.2.Difficulties of education in rural India:

In India, more than 65 percent of the population lives in rural areas and the literacy rate varies greatly in both urban and rural areas. According to the ASER study, a survey conducted and covering practically all rural areas, it was found that more than half of the children aged 3 to 16 years were able to read or perform mathematical skills in the age group of 5 to 16 years. However, there are other issues with schooling in rural India as well [8], [9].

- Shortage of availability of resources
- Deficiency of awareness of educational importance
- Unavailability of schools
- Economic condition
- Digital dividend

1.2.1. Shortage of availability of resources:

The resources available in rural areas of India are limited and rural schools also lack infrastructure there are no seats, playgrounds, laboratories, or toilets available, or if they are, they are in poor condition. Sometimes textbooks are not available in sufficient quantity, or if they are, they are in poor condition. Supply of stationery is also a problem as many rural Indians lack the financial means to meet fixed costs as well as other expenses. Another problem is the lack of transit options due to insufficient connections from one place to another, but another problem is that the number of teachers is low and schools in rural parts of India may have only one or two instructors.

1.2.2. Deficiency of awareness of educational importance:

Another explanation for the lower level of education in India is the lack of understanding of the need for education in rural areas. Agriculture and allied industries employ most of the people in rural areas or children join these industries from an early age and do not give much importance to their education. In rural India, religious beliefs, as well as other cultural traditions, are a major barrier to education. Most rural Indians think that children, especially women, should not need to study extensively and travel large distances to attend school. Instead of pursuing education, individuals should focus on finding a job that can help them make money [10], [11].

1.2.3. Unavailability of schools:

Schools are often less accessible in rural areas. Several students have to travel hundreds of kilometers to go from one village to another. Another problem is the lack of transport

options, so it takes longer to go to school or back home, and this problem also contributes to the high school dropout rate in rural India.

1.2.4. Digital dividend:

Another issue in India's rural education is the digital dividend. In today's globalized society, everyone is tech-savvy and uses apps in their daily life. Everyone must understand how to use them. During the Corona period, education is given online, but due to weak connectivity, rural students are not able to get an education. It also hinders schooling in rural India and some of them do not have access to schooling due to a lack of smartphones.

This paper is divided into several sections introduction, literature review, methodology, results, discussion, and conclusion. In the introduction, the author talks about the Indian education system in rural and urban areas. In this paper, the author explains the problem faced by students in rural areas or the lack of educational resources in rural areas. In the literature review, the author refers to a previous study on the rural education system which explains the problems which are faced during education.In this paper, the researchers conduct online surveys based on the status of the education system in rural and urban areas in India and take the opinion of several people related to rural and urban areas.

2. LITERATURE REVIEW

Pervin Oya Taneri and Cennet Engin-Demir studied educational quality in rural areas. This study aims to look at the educational quality of primary schools in Kalesik. Three administrators, 33 instructors, as well as 212 students in 7th, 6th, and 8th grades from three primary schools were recruited to participate in the study. Methods used to obtain information about school facilities, children's family background or educational aspirations, teacher characteristics, school environment or parental engagement, quality of education, curriculum implementation as well as technology availability, including instructional material. According to the author, according to the findings, the physical condition of the school is satisfactory for both the instructors and the pupils. On the other hand, there are plenty of instructors who teach outside their licensing areas. In addition, lack of technologies and parental involvement were explored as factors that could impact educational quality [12].

Sahana Sridhar et al. studied about importance of the rural education system in India. The authors of this paper discuss how the quality or accessibility of education in rural schools is a significant concern due to less dedicated instructors and a lack of appropriate textbooks and teaching materials. According to the author, most people in rural areas understand the value of education and believe that it is the only way to escape from poverty. However, due to the paucity of funds, families are unable to send their children to private schools and have to depend on public institutions for their education. If the number, quality, and commitment of instructors in these institutions can be increased, the aspiring rural students and India will be able to achieve their goals of achieving something great. Many public schools in rural India are overcrowded, resulting in an incorrect teacher-to-student ratio. One such remote community in Arunachal Pradesh has over 300 children in Class X, making up about 100 students in each class. Professors may be ready to help, but in such a situation it is difficult for them to give full attention to each child [13].

J.G. Sreekanthachari and G. Nagaraja studied rural education in India. Because more than half of the country's population lives in villages, rural development is an important component of the development of our economy. Education is an important driving factor for economic progress in today's world. Just as the liver is important for the proper functioning of the human body, education serves as the backbone of the economy. This study attempts to describe the current state of rural education, rural education versus urban education failures,

and issues facing rural education, to examine the important role of education in India, especially in rural India. It also highlighted the various programs of the government as well as some proposals to enhance the education system in rural or remote areas [14].

Research Questions:

- What are the important factors to improve the education system in rural areas?
- What are the factors which helps to understand the rural education?

3. METHODOLOGY

3.1.Design:

This paper's layout or design is based on an online survey in which the author selects some questionnaires based on the education system of rural and urban areas, how are they different from each other, and what kind of problems students face in the rural area. There is a clear divide between urban and urban education systems, and rural students face many challenges. According to the annual State Education Reports survey, two-thirds of the rural children's in India reported receiving any learning material as well as activities throughout the pandemic.

3.2.Sample and Instrument:

The objective of this paper is to study the status of the education system in India in rural areas or urban areas. In this study, which conducts online surveys on the state of the education system in rural or urban areas, the authors take a sample size of 300 this survey.

- What are the differences between rural and urban areas' education systems?
- What are the causes of rural-urban inequality in school education in India?
- Is the education system less in rural areas?
- What is the condition of rural areas' education system?
- How to improve the rural area education system?
- Which education system is better as compared to urban and rural?

3.3.Data collection:

The data is gathered through the online survey and the data were analyzed according to the respondent on various aspects.

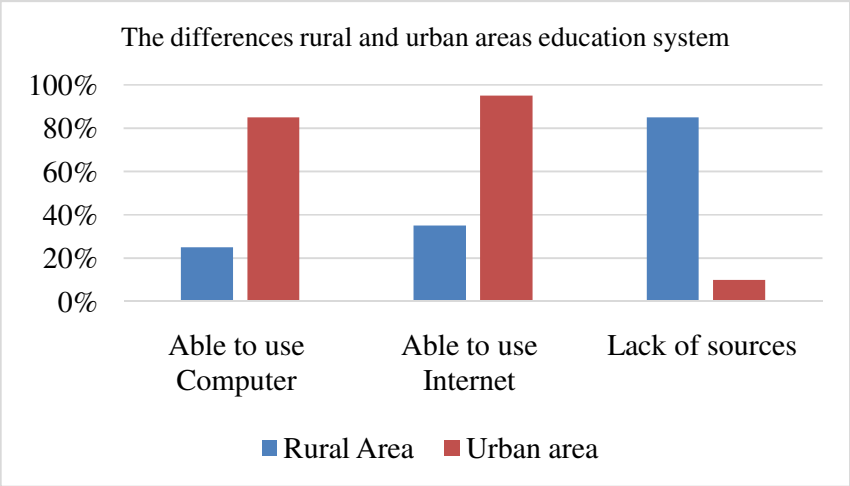

Figure 1: Illustrate the Differences between Urban and Rural Areas Education System.

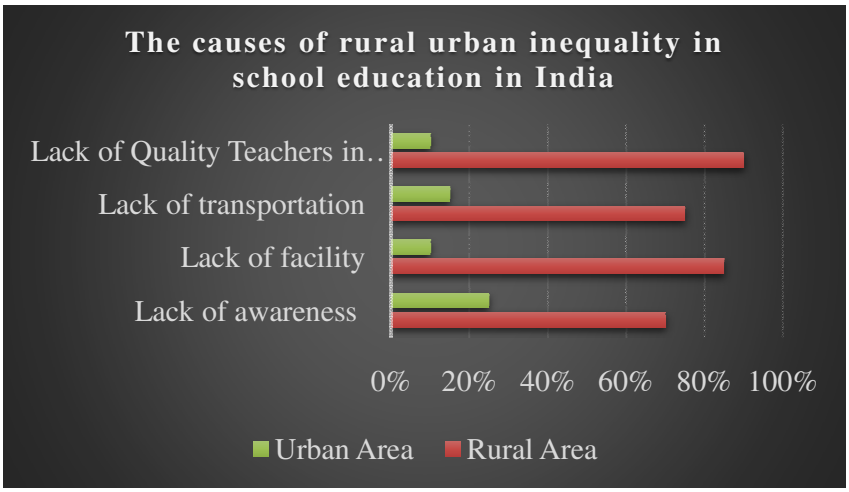

Figure 2: Illustrate the Causes of Rural and Urban inequality in School Education in India.

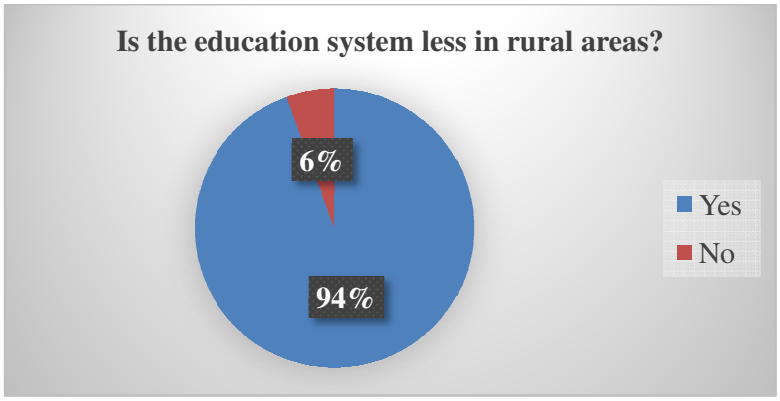

Figure 3: The above graph shows the percentage of lack of education in rural areas.

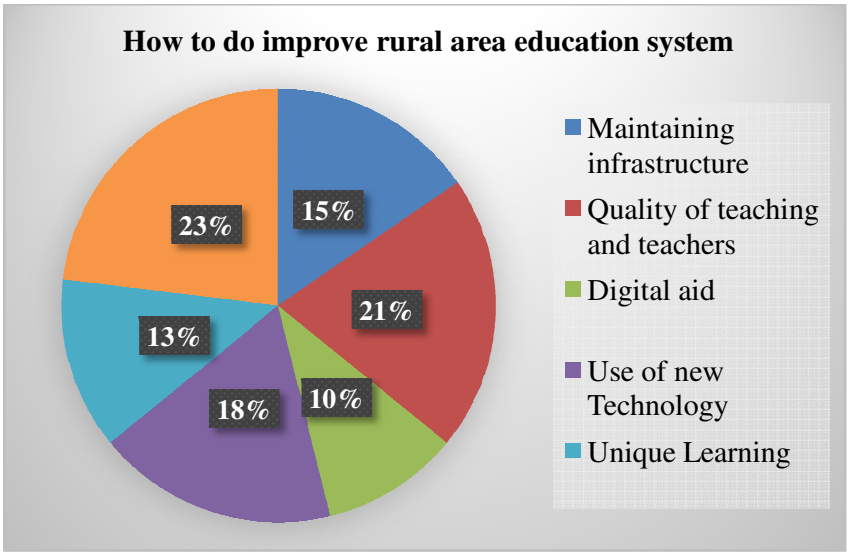

Figure 4: Above Graph Shows How to Enhance the Rural Education System.

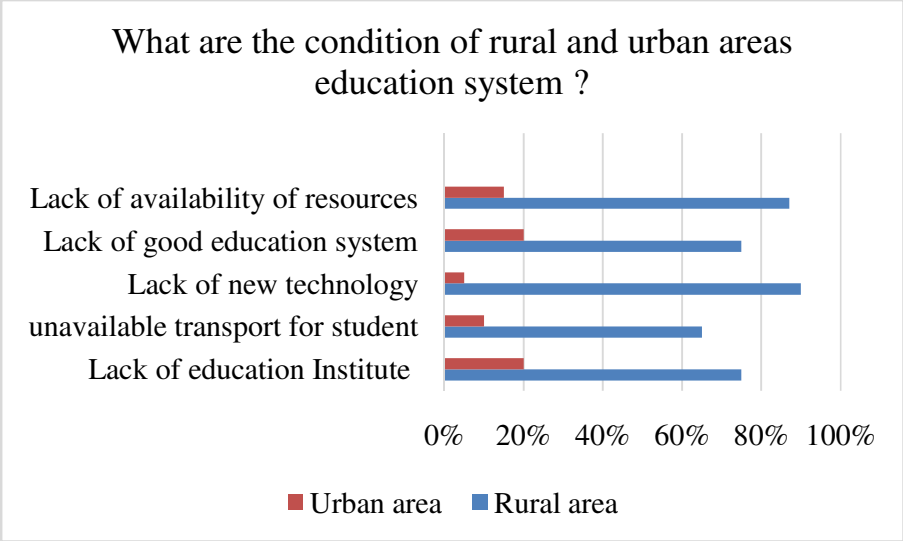

Figure 5: Above Graph Showing the Condition Rural and Urban Education System.

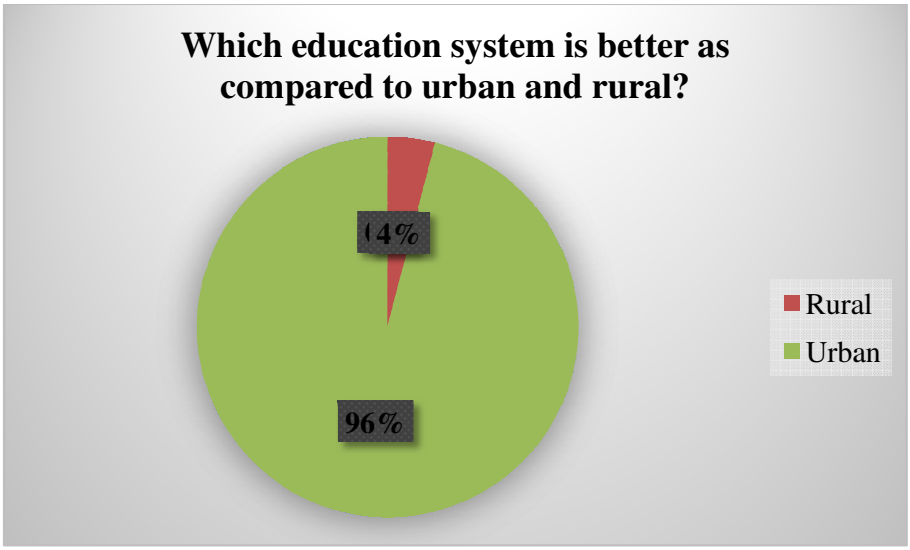

Figure 6: The Graph above Compares Rural and Urban Education Systems to see which is best.

3.4 Data Analysis:

An online survey was conducted to analyze the data based on the state of the education system in rural and urban areas for paper issuance and sampling. In this paper, the author shows the difference between the education system in rural and urban areas. Figure 1: Differences in the education system of the urban and rural areas, 25% of rural students out of 300 respondents can use computers, and 85% of students from urban areas can use computers according to the respondents. While 35% of students can access the internet in rural areas and 95% of students can access the internet in urban areas. According to the survey, the author found an 85 percent shortage of education resources in rural areas or a 10 % shortage of resources in urban areas.

Figure 2 shows that due to rural and urban disparity in schooling in India, in a rural and urban areas, 65% and 25% are not aware of the impotence of education. And 85% of people answered that students in the rural area are facing a lack of facilities, and 10% of urban students are facing a lack of facilities. And in rural areas, 65% of students are facing transportation problems because in areas school is far away from home and 15% of students are facing transportation problems. And there is an 85 percent and 15 percent shortage of quality teachers in the education system in rural and urban areas. Figure 3. 94% of people showed the respondents that urban education organization is better than rural education. And 6% of respondents say that the rural educational system is better than the urban one as per the survey.

Figure 4 shows ways to strengthen the education system in rural areas. 18% believe that the use of new technology will improve the rural education system, 21% believe that improving the quality of teaching and teachers will improve the rural education system, 15% believe that maintaining school infrastructure will improve rural education, and 13% believe that using new technology for learning will improve the rural education system. As per the government initiative, 23% of the respondents believe that the rural education system should be reformed. Figure 5 shows the conditions of the rural education system, as per the survey 85% of the respondents believe that the sources of availability of resources in rural areas are lacking. In a rural area, 64 percent of the respondents lack a good education system and 85% of the respondents feel that there is a lack of new technology in the rural area, the education system of rural areas is poor. 65% of the respondents say that transport is not available for the student. Figure 6 shows that 96 percent believe that urban education is better than rural areas.

4. RESULTS AND DISCUSSION

The major finding of this paper

- 85% of rural students are not able to use computers.
- 95% of students from rural areas are not able to access the internet for study purposes.
- 85% of rural students are suffering from a lack of resources.
- 23% of the respondents say that the government should take initiatives to improve the education system of rural areas. 21% of the respondents say that the use of new technology can improve the rural education system.
- The condition of the rural educational system is very bad. 65% of the respondents say that there is a lack of educational institutions in rural areas. 85% of students are facing a shortage of resources, and 65% of students are facing a lake of transport.
- 96% of the participant said that the urban educational system is better than the rural education system. Because facilities and resources are available in urban areas.

4.1.InIndia, there are several ways to improve rural education.

To improve education in India, we have to remove the above obstacles. To rectify this, we need to take the following steps:

- Encourage the use of free education.
- Increase the number of educational institutions.
- Adopting state-of-the-art teaching methods
- Scholarships are awarded.
- There should be infrastructure, and resources should be available.

4.1.1. Encourage the use of free education.

Free higher education is one of the most essential approaches to improving rural education and our constitution guarantees the right to education to all Indian citizens. The administration should focus on how to increase the number of youths enrolled in rural schools. Adequate resources and infrastructure can be established along with more schools to achieve this goal. Authorities must also guarantee that the number of school-going children completes elementary schooling. Another reason for advocating free education is that individuals in the Indian population do not have much money and therefore cannot afford high school tuition, forcing them to drop out.

4.1.2. Increase the number of educational institutions.

To improve education in rural India, the government should build more schools, most of the students are forced to drop out because of the long distance between school and home due to a lack of education system. This is especially true for women, with most girls dropping out of school due to lack of transportation. If schools are built in every village, it will help in increasing enrollment and reducing the dropout rate among the rural youth.

4.1.3. Enhance the modern technology:

In the delivery of education, advanced technologies are important, and in today's globalized world, where technology is constantly evolving, everyone needs to keep up with the latest developments. Furthermore, the focus of learning should be on conceptual understanding rather than rote learning, so that students need to use these new tools in their classrooms.

4.1.4. By setting up the necessary infrastructure and resources:

Another strategy to improve education in rural India is to provide adequate facilities and resources. The goal of education is to help people grow in all aspects of their lives. Availability of resources is also important when it comes to imparting education. Textbooks, laboratories, stationery, playgrounds, or benches should all be in good working order and accessible to all students. This will help in reaching the educational target along with the number of children enrolled in the school. The government should make laws and implement programs to improve education in the country with a special focus on rural areas.

5. CONCLUSION

Even though the rural education system has seen many amendments and changes, the rural schooling system has grown and improved. Nonetheless, many adjustments are still needed, and due to changes in the educational system in rural areas, rural networks can better understand the importance of education and support their businesses. India's literacy level is 77.7%, however, it differs across rural and urban areas. The literacy rate in urban and rural India is vastly different. However, there are other reasons behind rural India's low literacy rate. Rural India faces challenges in acquiring education due to the lack of schools or resources, a shortage of instructors, religious and cultural traditions, a wide distance between school and home, as well as a lack of education awareness. Building schools in every village, provision of suitable and adequate infrastructure as well as other resources, use of contemporary technology in education, or raising awareness about the value of education and rights are all ways to improve the current state of education in rural India. In this work, the authors conduct web-based investigations to analyze the state of the Indian education system in rural and urban areas, as well as the opinions of a few groups associated with rural and urban areas. As per the survey of this paper majority of respondents think that the urban educational system is better than the rural educational system. The major goal of this article is to know more about the status of India's education system in both rural and urban locations. In the future, this study will help to understand the status of India's education system in both rural and urban locations.

REFERENCES

Bibliography

[1] L. Meera and D. Bandaru, "A Feasible Rural Education System," *Int. J. Adv. Comput. Sci. Appl.*, 2012.

[2] S. Tian, "Improving the vocational education based Japanese teaching research approach using deep learning techniques," *Curr. Psychol.*, 2020.

[3] V. S. Mncube, B. H. Mutongoza, and B. E. Olawale, "Managing higher education institutions in the context of COVID-19 stringency: Experiences of stakeholders at a rural south african university," *Perspect. Educ.*, 2021.

[4] C. Da Silva, L. B. De Oliveira Suarte, and R. R. De Sousa Leitão, "Rural education in the public school system of the state of tocantins, Brazil (1999-2013)," *Educ. Policy Anal. Arch.*, 2020.

[5] H. Li and X. Li, "Rural and urban general education teachers' instructional strategies in inclusive classrooms in China: a dual system perspective," *Int. J. Incl. Educ.*, 2020.

[6] C. L. M. A. Caipang, "DEVELOPMENT OF A COMPUTERIZED ENROLMENT SYSTEM IN A RURAL-BASED HIGHER EDUCATION SYSTEM," *Acad. Res. Int. Part-I Nat. Appl. Sci.* , 2013.

[7] E. Shikalepo, "School cluster system for quality education in rural Namibian schools," *African Educ. Res. J.*, 2018.

[8] X. Meng and C. Yamauchi, "Children of Migrants: The Cumulative Impact of Parental Migration on Children's Education and Health Outcomes in China," *Demography*, 2017.

[9] R. Kapur, "The System of Education in Rural Areas," *Acta Sci. Agric.*, 2019.

[10] G. Rubio, L. Osandón, and F. Quinteros, "The territorial pedagogical experimentation and the democratization of the educational system. Lessons from the Rural Education Experimental Plan of San Carlos (1944-1947)," *Ensaio*, 2019.

[11] P. Maurya, "Need for Digital Learning in Rural Areas: Special reference to Higher Education," *Res. Rev. Int. J. Multidiscip.*, 2020.

[12] P. O. Taneri and C. Engin-Demir, "Quality of education in rural schools: A needs assessment study (Ankara-Kalecik Sample)," *Int. Online J. Educ. Sci.*, vol. 3, no. 1, pp. 91–112, 2011.

[13] S. SRIDHAR, "Literature Based Study On Utmost Importance Of Rural Education In India," *Core.Ac.Uk*, pp. 17–20, 2020.

[14] G. Nagaraja and J. G. Sreekanthachari, "An Overview of Rural Education in India," *Adv. Res. J. Soc. Sci.*, vol. 4, no. 1, pp. 115–119, 2013.

CHAPTER 5

SURVEY OF PEOPLE'S MENTAL HEALTH INFLUENCED BY MODERN TECHNOLOGY AND ITS IMPACT ON DAILY LIFE

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ABSTRACT: ***Adolescents' use of technological devices is steadily rising, perhaps leading to health problems and technology addiction. This research examines the incidence of electronic gadget use and health-related issues in India. This is a survey-based study in which respondents are invited to complete an online questionnaire and answer a series of questions about how they utilize technology. The author explored the physical health effects of contemporary technologies on individuals and how to treat them in this research. The results show that nearly 74% of respondents say they require a contact page to connect with others, while 26% do not. Conversational skills influence 55 percent of teenagers, whereas 26 percent are unaffected, and 19 percent say this item affects them regularly. The author concludes that As a result, it is commonly established that if gadget use is not strictly managed, technology addiction may have a harmful influence on users' mental health. The outcomes of this research can help academics, heavy gadget users, and those who are glued to their electronics in their daily lives.***

KEYWORDS: ***Eyestrain, Mental Health, Networking, Phones,Social.***

1. INTRODUCTION

While many sorts of innovations there must be proof of humankind's bad repercussions and misuse, which have had a huge influence on the globe. Phones and mobile gadgets can cause types of symptoms including visual fatigue and difficulties concentrating on vital activities [1], [2]. Emotions might also be involved in more significant health issues like anxiety. Excessive advancement of smartphones may have a greater impact on children and teens who are still growing.

1.1.Eyestrain:

Eyestrain is produced by devices that can hold the attention of the public for long periods, also including portable smartphones, iPhones, and computers. This could result in eye strain. Digital eyestrain is manifested by diplopia and dry eyes. Eye strain can induce pain in the temples, spine, and wrists, among other areas of the body. Eye strain can result from several technical factors, including:

- Computer Shimmer
- Window Luminance
- Viewed from too closely but far enough away
- Persistent Vision
- Difficulties due to the bad seating position

1.2.Bad Posture:

Many people's usage of mobile devices and notebook computers may result in improper posture. Something may lead to orthopedic problems over time. Many technologies urge individuals to have a "southward more forward" orientation, in which participants bend to the front and concentrate intently on the computers. This could put an excessive amount of tension on your neck and shoulders [3]–[5].

1.3.Sleep Issues:

Sleep issues are caused by using devices too enough toward the eyes at night. Blue light, such as that emitted by smartphones, e-readers, and computers, affects the brain, resulting in this effect. This level of exposure is enough to throw off the body's natural circadian rhythm. This interruption may make it harder for the individual or cause them to be less engrossed the following day [6], [7]. Switching off digital devices that generate the sun's rays 20 minutes before night to avoid the potential repercussions of sunlight on the brain. Instead, rest and decompress by reading a book, doing light squats, or swimming.

1.4.Physical Activity Is Reduced:

Sedentary communications technology makes up the vast majority of current communications technology [8], [9]. More frequent usage of these gadgets promotes an unhealthy relationship with food, which has been related to negative health outcomes like:

- Obesity
- Cardiovascular problems [10], [11].
- Diabetes type 2 causes early mortality

Finding strategies to disconnect from sedentary devices can aid in the promotion of a healthier lifestyle Figure 1 depicts the influence of contemporary technologies on people's physical health [12], [13]. This is survey-based research in which the author conducted an online survey in which respondents were given a variety of questions about the harmful effects of the internet on their mental health. People on the internet are asked a variety of questions, in this research all the data is collected and analyzed uniformly in an effective manner.

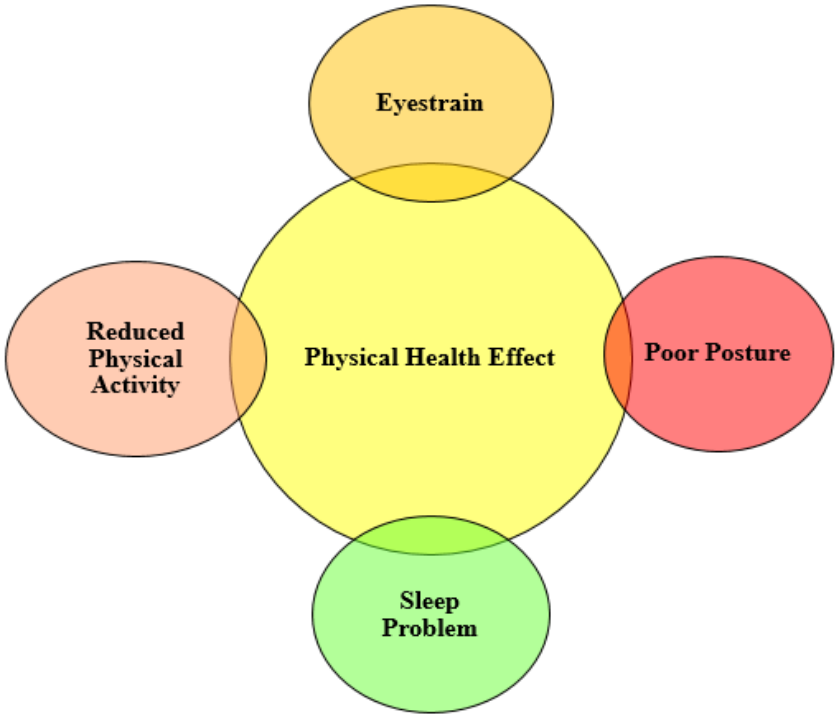

Figure 1: Illustrates the Effect of Modern Gadgets on the Physical Health Of People [14]–[16]**.**

2. LITERATURE REVIEW

J. J. Chapman et al. in their study embellished that due to the obvious COVID-19 pandemic and accompanying limitations, people with mental illnesses may be at risk of mental health deterioration and limited physical activity. Chapman et al. applied a methodology in which they surveyed 63 people. The purpose of this research was to aid in the development of physical activity treatments for this population in various settings to enhance their healthcare and exercise habits. Mentally ill individuals who had previously participated in a healthy and active lifestyle were asked to respond to the questionnaires well about the effects of COVID-19 on their mental health and physical behavior, as well as their appreciation of active participation in a fitness programmer under viral disease restrictions. The author concludes that during a pandemic, moreover half of the surveys found poor mental health and decreased physical activity. A physical exercise service's recommended format [17].

L. Gitlow et al. in their study illustrate that while there is evidence that persons with major mental disorders can benefit from ordinary technology, there is little proof that they do so in their daily lives. Gitlow et al. applied a methodology in which they stated that this research looked into how persons with severe mental illnesses utilize technology, what else they would love to use one for, and that they're not using certain features right now. The results show that 92.3 percent of respondents own or use a cellular device, 69.5 percent use Facebook messenger, 88.9 percent use email, and 67.9 percent use voicemail, according to the findings. The author concludes that the findings have implications for the findings as well as treatment methods including technology [18].

A. Sau et al. in their study embellished that various mental health illnesses, most often social phobia, are widespread among seafarers. Sau et al. applied a methodology in which they stated that 435 sailors were interrogated at the Haldia Dock Terminal in Bangladesh after receiving the necessary permissions and ethical clearance. A variety of sociodemographic, occupational, and health-related data was gathered. The Liebowitz Social anxiety Scale would have been used to measure depression symptoms. As a result, early diagnosis of clinical depression is essential for one's health and well-being. Transfer network intelligence, according to the author, might be utilized as a rapid and automated screening technique to identify at-risk seafaring and quickly refer them to psychiatric treatment and psychoanalysis. The goal of this study was to examine the efficacy of several data mining algorithms for detecting emotional distress among seafarers [19].

In this research, the author looked into people with mental diseases who reported poor behavioral well-being and limited physical activity during the pandemic in nearly half of the surveys. People with mental diseases reported poor behavioral well-being and limited physical activity during the pandemic in nearly half of the surveys. The ideal framework for a physical fitness service the purpose of this research was to see how effective various algorithms were in detecting emotional discomfort.

Research Questions

- How is mental wellness as important as other things in life?
- How technologies do is affecting the physical health of a person?
- How to live a healthy lifestyle by excluding modern gadgets?

3. METHODOLOGY

3.1. Design:

This research is survey-based research in which the author performed an online survey in which different kinds of questions were asked to the people regarding the negative effect of

the internet on the people's mental health. Different types of questions are asked to the people online like when they are out with buddies, do you text someone else is social media just another way for cyberbullying to go undetected person, and do they prefer to communicate with coworkers in person or via technology.

3.2. Sample And Instrument:

This study is based on an online questionnaire that asks a series of questions from a variety of people in such a way that the odds of making an error are reduced. The data was previously gathered and evaluated in a different format to raise the extent of underestimating. In this research, pie charts and graphs were utilized to better interpret the data.

3.3. Data Collection:

- Is social networking consuming far too much of the time that may be better spent elsewhere?
- Do you feel compelled to always have a contact page in today's culture since so many others do?
- Is messaging, and cellular telephones in general, robbing today's youngsters of the conversational skills they need to succeed?
- Do you text someone else when you're out with friends?
- Is social networking merely another method for cyberbullying to go unnoticed?
- Do you prefer to interact with colleagues in person or through technology?

3.4. Data Analysis:

All the data is collected and analyzed in an effective, manner such that Figure 2 depicts an individual's time spent on social media. Figure 3 depicts the contact page culture among people in a certain field. Figure 4 depicts the different percentages of young people and the impact of smartphones on their lifestyles. Figure 5 shows the pie chart of people who text someone else when they are with someone on text Figure 6 shows the different percentages of unnoticed cyberbullying people Figure 7 embellishes the many types of human interaction, such as face-to-face, online, and feed scrolling.

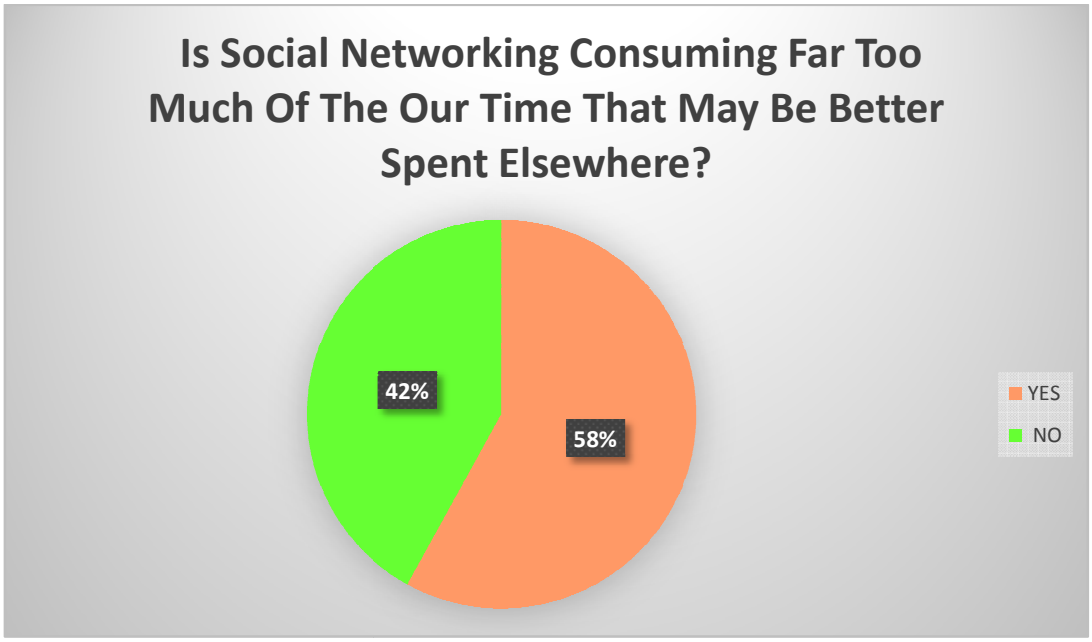

Figure 2: Illustrates the social networking consumption of the time of an individual.

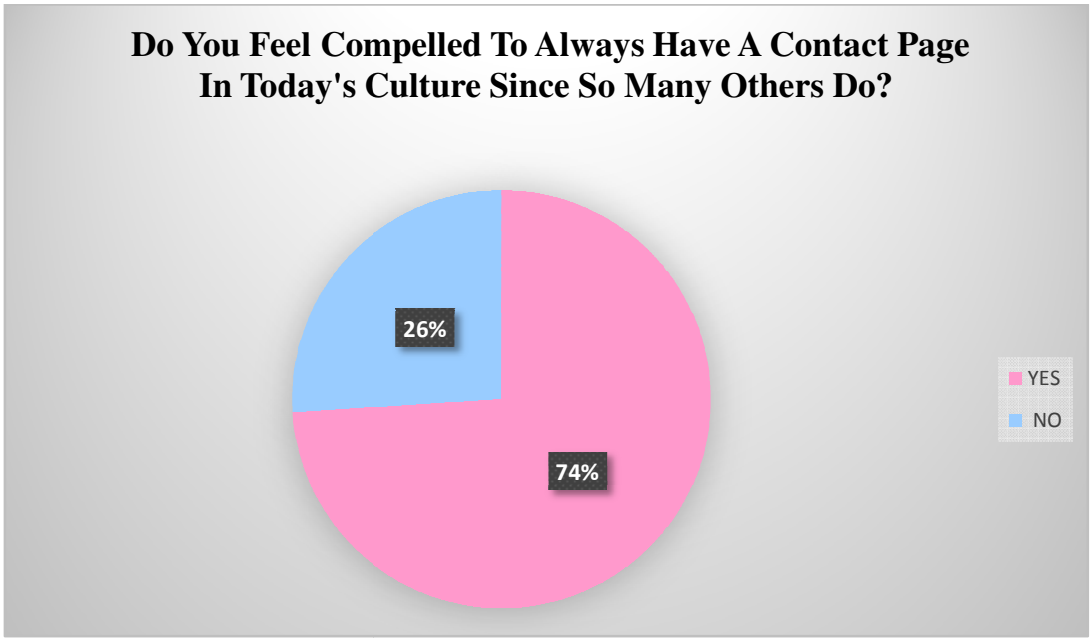

Figure 3: Embellishes the contact page culture with the people in a respective field.

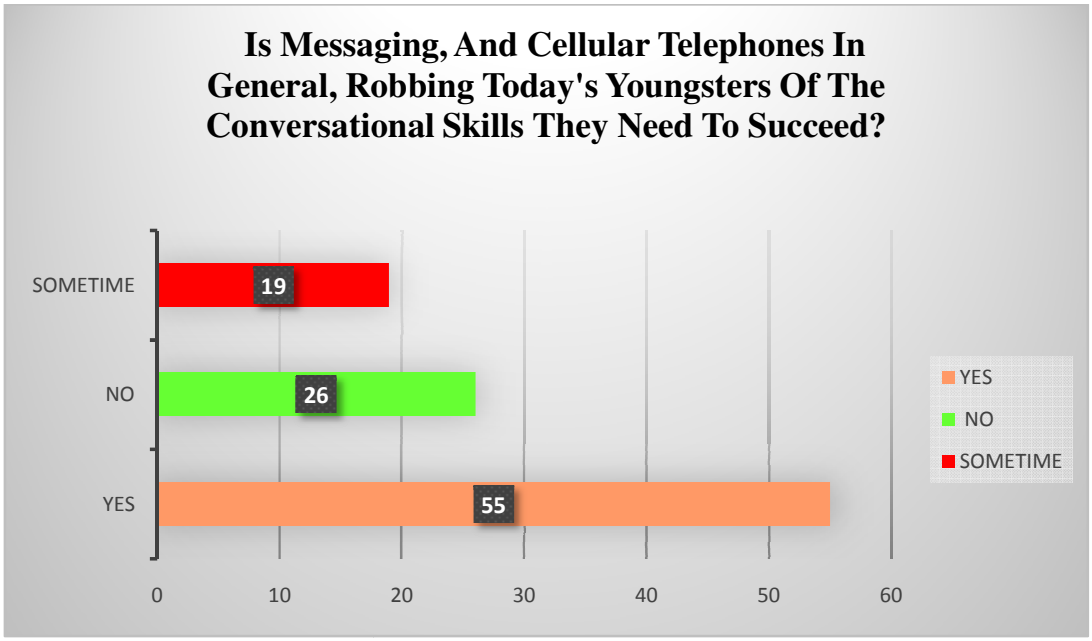

Figure 4: Discloses the different percentages of the youngster and the impact of the smartphone on their lifestyle.

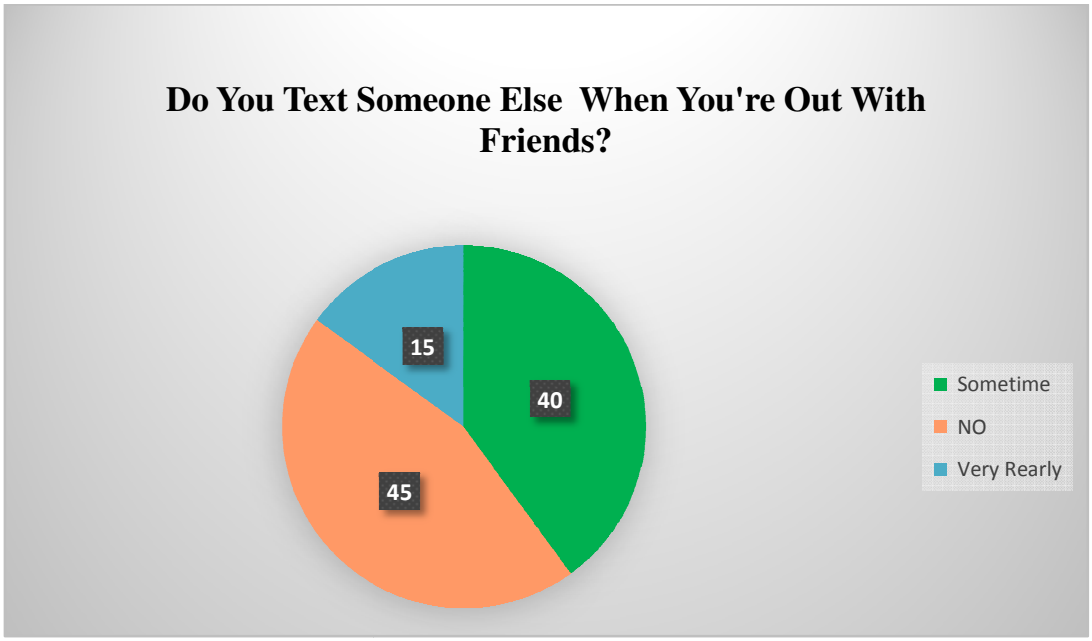

Figure 5: Illustrates the pie chart of the people who text someone else when they are with someone on text.

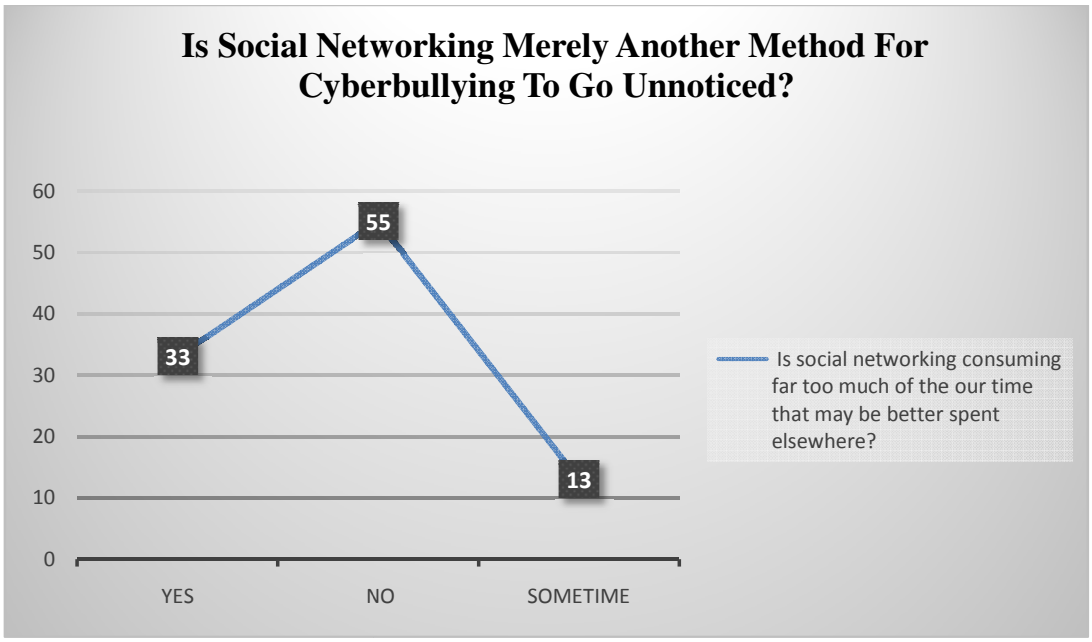

Figure 6: Discloses the different percentages of cyberbullying that go unnoticed by the people.

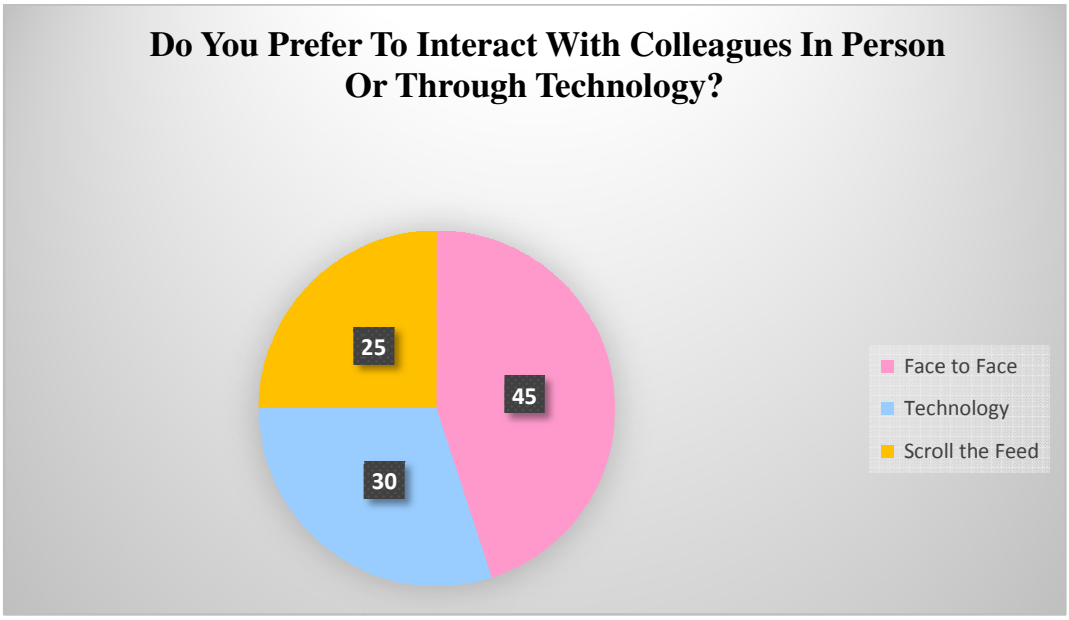

Figure 7: Embellish the different types 0f interaction with the people like face to face, online and feed scrolling.

4. RESULTS AND DISCUSSION

According to the pie chart, approximately 58 percent of individuals spend their time on social networking sites, while 42 percent spend time with friends and family. Nearly 74% of respondents believe they need a contact page to communicate with others, while 26% believe they don't.The number of teens who are impacted by conversational skills is 55 percent, whereas the percentage of teenagers who are not affected is 26 percent, and 19 percent believe this specific item impacts them occasionally. According to the pie chart, 45 percent of people do not text anybody else when they are with friends, 40 percent text someone else, and 15 percent do it extremely seldom.33% of respondents claim they have suffered cyberbullying in their lives, 55% say they have never experienced cyberbullying on the internet, and 13% say they have experienced cyberbullying on occasion.Nearly 45 percent communicate with individuals in person, 30 percent speak online with friends and family, and 25 percent simply skim through the feed.

5. CONCLUSION

Though many types of breakthroughs have been made, there must be proof of humankind's negative consequences and abuse, which have had a significant impact on the world. Phones and other mobile devices can produce a variety of symptoms, such as visual tiredness and difficulty concentrating on important tasks. As a result, it is well understood that if gadget use is not carefully regulated, the problem of device addiction can negatively impact users' mental health. Academics, heavy gadget users, and people who are addicted to their devices in their daily lives can benefit from the findings of this research. The future scope of this paper is more study is needed in this area to dive deeper into additional concerns associated with each aspect of gadget addiction to strengthen the research framework, which will eventually lead to the development of a standard guide for managing gadgets usage in India.

REFERENCES

[1] S. W. Flint, A. Brown, A. A. Tahrani, A. Piotrkowicz, and A. C. Joseph, “Cross-sectional analysis to explore the awareness, attitudes and actions of UK adults at high risk of severe illness from COVID-19,” *BMJ Open*, 2020, doi: 10.1136/bmjopen-2020-045309.

[2] A. Williams, E. Fossey, J. Farhall, F. Foley, and N. Thomas, "Recovery after psychosis: Qualitative study of service user experiences of lived experience videos on a recovery-oriented website," *JMIR Ment. Heal.*, 2018, doi: 10.2196/mental.9934.

[3] K. T. G. Wong, D. Liu, R. Balzan, D. King, and C. Galletly, "Smartphone and internet access and utilization by people with Schizophrenia in South Australia: Quantitative survey study," *JMIR Mental Health*. 2020. doi: 10.2196/11551.

[4] B. Druss, "27.3 A MOBILE PERSONAL HEALTH RECORD FOR BEHAVIORAL HEALTH HOMES: PRELIMINARY RESULTS FROM A RANDOMIZED TRIAL," *Schizophr. Bull.*, 2019, doi: 10.1093/schbul/sbz022.113.

[5] J. D. Tenenbaum *et al.*, "Translational bioinformatics in mental health: Open access data sources and computational biomarker discovery," *Brief. Bioinform.*, 2017, doi: 10.1093/bib/bbx157.

[6] P. Weigle and T. Peters, "LOGGING ON TO THE POSITIVE ROLE OF TECHNOLOGY IN PSYCHIATRIC PRACTICE," *J. Am. Acad. Child Adolesc. Psychiatry*, 2019, doi: 10.1016/j.jaac.2019.07.587.

[7] ISRCTN34124141, "Mobile technology health management for patients with severe mental illness," *http://www.who.int/trialsearch/Trial2.aspx?TrialID=ISRCTN34124141*, 2019.

[8] W. Thurman, M. Semwal, L. R. Moczygemba, and M. Hilbelink, "Smartphone technology to empower people experiencing homelessness: Secondary analysis," *J. Med. Internet Res.*, 2021, doi: 10.2196/27787.

[9] M. L. Bessaha, E. L. Sabbath, Z. Morris, S. Malik, L. Scheinfeld, and J. Saragossi, "A Systematic Review of Loneliness Interventions Among Non-elderly Adults," *Clin. Soc. Work J.*, 2020, doi: 10.1007/s10615-019-00724-0.

[10] R. Kumar, B. S. Chhikara, K. Gulia, and M. Chhillar, "Review of nanotheranostics for molecular mechanisms underlying psychiatric disorders and commensurate nanotherapeutics for neuropsychiatry: The mind knockout," *Nanotheranostics*. 2021. doi: 10.7150/ntno.49619.

[11] D. Hidalgo-Mazzei, A. H. Young, E. Vieta, and F. Colom, "Behavioural biomarkers and mobile mental health: a new paradigm," *International Journal of Bipolar Disorders*. 2018. doi: 10.1186/s40345-018-0119-7.

[12] A. S. Cohen *et al.*, "Psychiatric Risk Assessment from the Clinician's Perspective: Lessons for the Future," *Community Ment. Health J.*, 2019, doi: 10.1007/s10597-019-00411-x.

[13] I. Pajevic *et al.*, "Organization of mental healthcare in Bosnia and Herzegovina during coronavirus disease 2019 pandemic," *Indian J. Psychiatry*, 2020, doi: 10.4103/psychiatry.IndianJPsychiatry_1044_20.

[14] C. Paterson *et al.*, "Evidence for implementation of interventions to promote mental health in the workplace: a systematic scoping review protocol," *Syst. Rev.*, 2021, doi: 10.1186/s13643-020-01570-9.

[15] J. A. Naslund, L. A. Marsch, G. J. McHugo, and S. J. Bartels, "Emerging mHealth and eHealth interventions for serious mental illness: A review of the literature," *Journal of Mental Health*. 2015. doi: 10.3109/09638237.2015.1019054.

[16] V. Castro, "Could technology enable individuals with schizophrenia to access health care? The case of Ecuador," *Journal of Enabling Technologies*. 2021. doi: 10.1108/JET-01-2021-0002.

[17] J. J. Chapman *et al.*, "Preferences of people with mental illness for engaging in exercise programs under COVID-19 restrictions," *Australas. Psychiatry*, 2021, doi: 10.1177/1039856220975299.

[18] L. Gitlow, F. Abdelaal, A. Etienne, J. Hensley, E. Krukowski, and M. Toner, "Exploring the Current Usage and Preferences for Everyday Technology among People with Serious Mental Illnesses," *Occup. Ther. Ment. Heal.*, 2017, doi: 10.1080/0164212X.2016.1211061.

[19] A. Sau and I. Bhakta, "Screening of anxiety and depression among the seafarers using machine learning technology," *Informatics Med. Unlocked*, 2019, doi: 10.1016/j.imu.2018.12.004.

CHAPTER 6

EXPLORING THE SIGNIFICANCE AND DEVELOPMENT OF NEW TECHNOLOGIES IN EDUCATION SECTORS

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ABSTRACT: ***Today, technology plays an important role in every field, and due to the rapid growth in technology has made work easier and also reduced time. The concept of technology in the education sector was introduced during the last few years. Education and Technology are the two words that make up educational technology. During a pandemic it was a very difficult task for teachers and students to study online because before the pandemic all classes were conducted offline, so to solve this problem new technology was introduced allowing students to study from anywhere. However, technology has improved student's ability to learn and understand. This study is mainly focused on the development of new technology in educational fields, importance, different types of technology, and also the advantages and disadvantages of educational technology. The development of educational technology is very useful as it enhances the quality of education, reduces time, and enhances teaching and learning. In future, educational technology can help in enhancing the quality of school education, educational system, communication, and increased resources.***

KEYWORDS: ***Education, Educational Technology, Learning, Student, Teaching.***

1. INTRODUCTION

It's impossible to imagine how life would be now without the help of technology. The modern generation lives in a computerized world in which information is disseminated practically as quickly as they are created. Many of the technologies created in the early beginnings of humanity are just now being upgraded and per the latest insights as to how precisely current today's students prefer to utilize technologies. But how does their education receive an influence if they use technology, it was revealed that the usage of contemporary equips systems and technologies, the learning or involvement of students develops. Information transfer becomes very easy, convenient, and effective. This shows that modern human brains prefer to function more quickly when assisted by technology [1], [2]. Nowadays, even in schools, colleges, and universities, reliance on such an innovation that essentially makes life a simple, enjoyable journey is inescapable.

Education is evolving as a result of technology, which is also empowering students by altering where, when, and how they learn. By providing students control over their study habits, integrating school into their digital lives, and preparing them for the future, technology sets students on the road to personalized learning. Thanks to technology and access to resources outside of the classroom, children are encouraged to become intellectuals, collaborators, problem solvers, and creators. Children who are appropriately exposed to technology in the classroom develop a lifelong love of learning. Teachers are always trying to modify the way that pupils learn. Technology may help them reach new heights by giving them access to actual student data, continuous information, tools, applications, and more. Incorporating new teaching and learning paradigms into schools may be made possible by technology by helping educators create blended learning environments and use online resources for formative and summative evaluations [3], [4]. Figure 1 shows the Learning Technology Framework which provides important are of learning technology [5], [6].

1.1. Developments of Educational Technology In 2020-202:

Machine Learning, the Internet of Things, as well as Big Data were the main educational technology developments. However, "distant learning" has developed the single trend that dominates them all. The Coronavirus disease 2019 ("COVID-19") epidemic has profoundly affected the way anyone learns and teaches. Due to social distance, students today need to get used to remote learning using digital platforms. This cycle may continue until 2021 though some institutions have returned [7], [8]. With such a strong emphasis on connectivity, flexibility, and student-centered information, the most recent Educational Technology ("EdTech") advances are being altered.

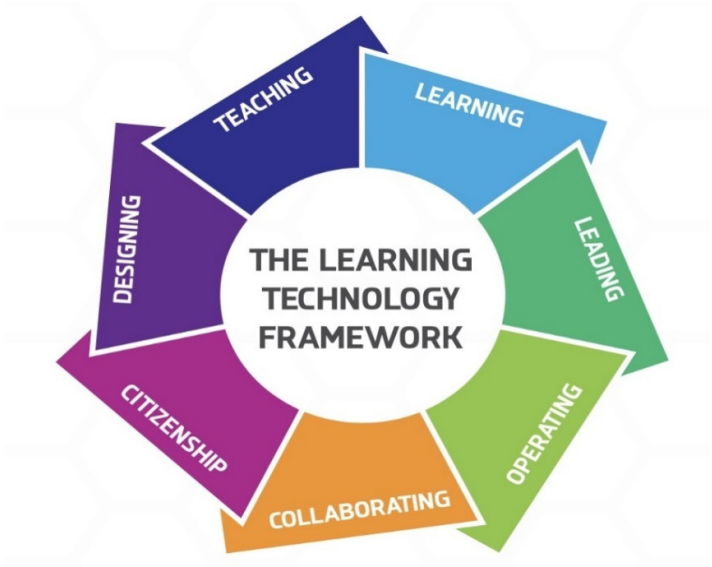

Figure 1: Illustrating the Learning Technology Framework. It tackles seven aspects of educators' actions, attitudes, and Practices using Learning Technology [9]**.**

1.2. Educational Technology:

Several people describe EdTech as using technology to advance education. Although true, it is insufficient. The "Association for Educational Communications and Technological" (AECT) defines EdTech as the use of appropriate technological tools and practices to promote learning and improve performance [10], [11]. On either hand, instructors who use EdTech do it more straightforwardly. They believe that the idea is to convert traditional book teaching and learning into a digital format. For them, the key difference is in the way information is disseminated to improve education. In conclusion, EdTech is primarily a method of effectively integrating to improve teaching-learning interactions and boost student learning.

1.3. Reasons as well as the importance of EdTech:

There are lots of explanations for why instructors went to "EdTech", forsaking the conventional paper as well as pen teaching style [12], [13]. Particularly highlighting some frequent benefits of "EdTech" as shown below:

1.3.1. Approaches of Inventive Teaching:

Since technology is a human innovation, it is innovative of a teacher to incorporate technology into the classroom. "EdTech" enables teachers to provide multimedia, such as live animation, video, etc., to accommodate various learning styles. Additionally, EdTech enables

academics to create online courses so that students may learn at their own pace and in their environment.

1.3.2. Advance Teaching like Collaborative:

Development has brought it feasible for everyone to remain connected. Instructors as well as Students discuss, offer their viewpoints, interact, as well as act upon worries jointly. For example, E-Learning is an educational technology that fosters cooperation by allowing students to share and discuss. Instead of sitting in a classroom and listening to a professor's lecture for thirty minutes, E-Learning learners may start an online group as well as study together by communicating with their peers. In this condition, teachers are more available as well as operate as mentors to help learners develop themselves. This collaborative learning strategy has filled the gap between students and teachers and also helps students enhance their interpersonal skills.

1.3.3. Learning Process and Teaching:

Initially, EdTech enhances how instructors teach, mixed offline and online. Students will no longer have to be in class at a certain time to study; as a result, EdTech alters how students approach learning. Children find learning more exciting and engaging thanks to Edtech. Last but not least, technology improves learning by making it easier to obtain and more intelligent. Theoretical and practical knowledge is imparted to students by true instructors. However, the best teachers are those who can create classes based on what students want to learn.

1.4. Recent Educational Technology in 2021:

If someone is a creative educator, observing the developments in education is probably not anything novel but rather vital. Here are the latest educational technology breakthroughs (Figure 2) that are crucial to know.

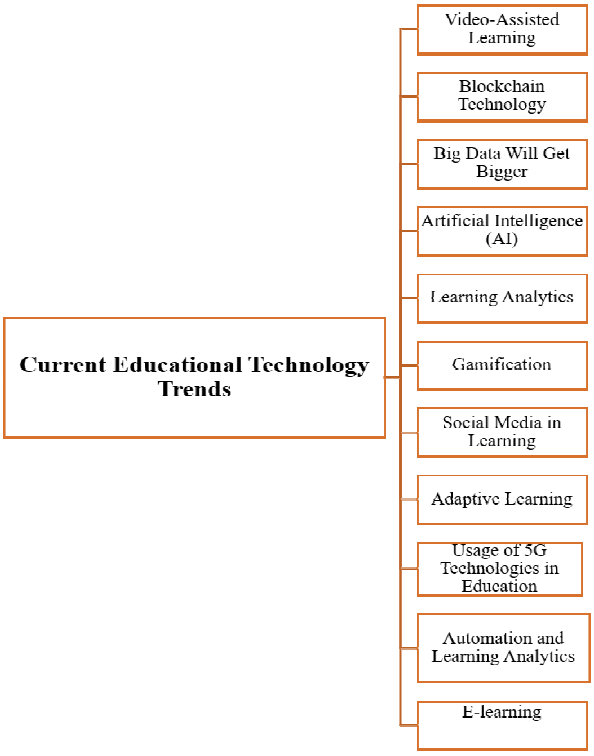

Figure 2: Illustrating the Various Recent Technologies which are used in Educational Sectors.

1.4.1. LearningVideos:

In recent times, classroom presentations and video-assisted learning have become increasingly commonplace. A television on a cart being carried into a class is no longer the "video day." Every day may be a "video day" with the help of digital devices and the internet. This pattern is also becoming more prevalent in online learning environments where students use screens to study (Computer Display). Both the performance of pupils and the workload of instructors are improved by this technology [14].

1.4.2. E-learning:

Online courses became the number 1 from the year 2021 educational technology trend overnight due to the quick increase of pandemics as well as closures of educational sectors. As a result, demand for online learning systems rose. E-learning is instruction or training delivered online. It might be slide-based online activities or even an online course that aids in educating staff members on crucial abilities. With e-learning, students get educational material on their PCs, laptops, tablets, or smartphones. Giving participants a variety of learning opportunities rather than just cutting down on time. Learners may choose what they need to learn quickly and easily instead of participating in a unique experience [15]. In E-Learning, learners only imbibe information by reading or viewing material, it transforms the method of education given. Also, many E-Learning courses in audio, movies, as well as incorporating animation offer a multimodal and practical learning experience.

1.4.3. Block-chain Technologies:

This “Distributed Ledger Technology” (DLT) from Block-chain delivers distinct benefits to schools. The capacity is potentially limitless since each time fresh data is uploaded, it adds another "block" to the system. The data will be dispersed across several system devices while also being encrypted. Transactional data become decentralized and transparent as a result. E-Portfolios and Massive Online Open Courses use blockchain technology to validate skills and knowledge. The challenges of authentication, scale and cost for eLearning enterprises will be addressed by the DLT systems. Additionally, it could help eager students announce their achievements while looking for jobs.

1.4.4. Big Data:

To meet the students' expectations, the instruction must be individualized. "COVID-19" and the development of online learning have given everyone access to more data than ever before. The classroom learning experience offers crucial information about the experiences of the learners that may be used to develop the course and deliver it appropriately. You should look at the course's content, student performance, enrollment figures, and learner suggestions.

1.4.5. Learning-Analytic:

Particularly for higher education, the contemporary learning analytics environment has dramatically changed. Learning analytics enable the use of the web for tracking and reporting on student learning. They might utilize it to maximize their learning if they have a better knowledge of it. When instructors examine insights from the students' learning processes, the knowledge and skill development of their pupils may be sufficiently boosted. For instance, educators may discover the knowledge that students like and utilize it more often in succeeding sessions. To improve the next time, professors may assess whatever teachings weren't adequately received. Learning analytics also helps instructors spot groups of students who could be having difficulties. Teachers may develop a strategy from it as well to assist kids in achieving excellence.

1.4.6. Gamification:

Gamification is the most appropriate educational technology trend for anybody looking for a way to make learning a more enjoyable and engaging experience. There is no excuse for youngsters not to participate actively in class games. While participating in fun gaming activities, students may learn and practice. For learners, gaming aspects assist create a humorous and enjoyable learning experience. Gamification adoption is quite widespread in the K–12 education industry. It's because kids get quickly addicted to gaming videos and score higher in games. But it doesn't mean those pleasant elements aren't needed in higher education or corporate training to increase students' levels of involvement.

1.4.7. Social Media in Learning:

Why not just use social media as a powerful instrument to enhance learning when practically every student adult or young spends so much time on it? And that is how the idea of using social media for teaching originated. Social media is now widely used in educational institutions as a means of communication so that students may easily interact with others. Students may interact with others in a group and share study materials. Even an animated educational movie may get traction online. Social media is here to stay and fosters a culture of sharing and collaboration that improves learning.

1.4.8. "Adaptive Learning":

Adaptive learning is a method that assigns learning assignments to students depending on their needs and preferred learning styles, as the name suggests. Think about adaptive learning like a piece of technology that quickly adapts to the needs of all pupils. Young people may use it to adapt to different learning paths that are entirely reliant on their interests and cognitive flexibility. Although artificial intelligence gave rise to adaptive learning, it continues to actively supply superior learning activities and resources that are specifically tailored to a student's needs. The field of education is where adaptive learning is most often used.[16].

1.4.9. Usage of Fifth Generation (5G) Technologies:

The "fifth generation" of wireless technology is known as 5G. All users of it now have access to high-speed, low-latency wireless technology thanks to its further upgrades. Due to the quick downloading of educational materials and information and the availability of far more robust networks, students are more likely to benefit from this novel creation.

1.4.10. Automation and Learning Analytics:

A significant portion of our modern world is powered by automation. Commercial and economic sectors provide automation to provide faster experiences as engagement rises. Learning is a very large process that needs proper monitoring and analysis to better comprehend outcomes. As a technological innovation, learning analytics has already been employed by instructors to better monitor the learning habits of children [17].

The use of technologies in schools gives students the tools they need while providing them with the in-depth professional and technical training they need to succeed in school and the workforce of the future. Specific skills in coding, physical computing, programming, and computer science are now often required in the sector. Children may develop these skills while creating to sharpen their critical thinking and problem-solving abilities for the twenty-first century. When prepared along with the right technology, learning by doing while using maker mindsets and environments may be immensely fascinating.

2. DISCUSSION

Imagine a future in which everywhere, everyone, has access to the world's greatest education. Imagine no restrictions, no exclusions. Elderly, affluent, poor, young, from the mega-cities to isolated hillside villages linked schools to fully connected students studying from wherever. The main educational activities are those that include learning. The success and purpose of education rely on methods that are deliberated and carried out in a creative, inventive manner, avoiding the use of technology in education. The issue of high-quality education is one of the problems facing the globe today. Based on that supposition, an attempt might be made to improve learning by leveraging students' desires in gaining cognitive, effective, and emotional skills. Students may study anywhere and whenever they choose, without being restricted by time or location, using the resources provided. In addition to using this method, educators may also provide knowledge via visual, audio, animated, or even text media, further diversifying how individuals learn.

Learning is really about understanding how kids learn. To enable kids to utilize all of their skills in carrying out the required learning tasks, teaching and learning strategies place a strong emphasis on students' involvement in the process. This implies that the development of appropriate student learning activities is required for effective learning. For students to be more involved in following their abilities and awareness, teachers must be able to create favorable environments. The goals may be used to determine how effective schooling is. Education must be systematic from the phases of design, planning, evaluation, and improvement as well as being attentive to the demands of the workplace. To make an effort to achieve the objective, which includes learning requirements, it must be described. It has to be started with the abilities or strength of people concerned, especially kids, teachers, society, and the government.

Based on its ability to achieve educational goals, appropriate technology in education must be evaluated. The fundamental goal of educational technology is to foster imagination and analytical thinking. It is necessary to describe the purpose of education, as well as the technologies used in it, to better understand how to assess the viability of educational technology. How effective is the use of modern instructional technology?

2.1. Importance of Technology in Education:

Technology Education has changed from being reactive and passive to being active and combative. In both academic and business settings, education is essential. In the former, personnel is given education or training to enable them to execute their tasks in a different way than they previously did. In the latter, learning is built on encouraging learners' curiosity. Utilizing technology may improve how well students learn and retain knowledge in all situations. The current technologies are demanding that instructors understand how to utilize this technology in their education [18], [19].

Learning tools that are effective and efficient in helping students acquire the necessary skills are helpful for both teachers and students in the context of educational technology [20], [21]. Therefore for the learning process to be successful, learning resources like television, computers, radio, the internet, and some other equally fundamental as well as contemporary tools are crucial. If the instructor adopts a student-oriented learning strategy, educational innovation learning will be extremely successful. The role of the media or methods in the process of online education is not merely to interact with the link between the source and the receiver, but also to be an important part with links to other components that interact and have an influence on one another. Positive and negative repercussions of contemporary educational technologies as demonstrated in Figure 3.

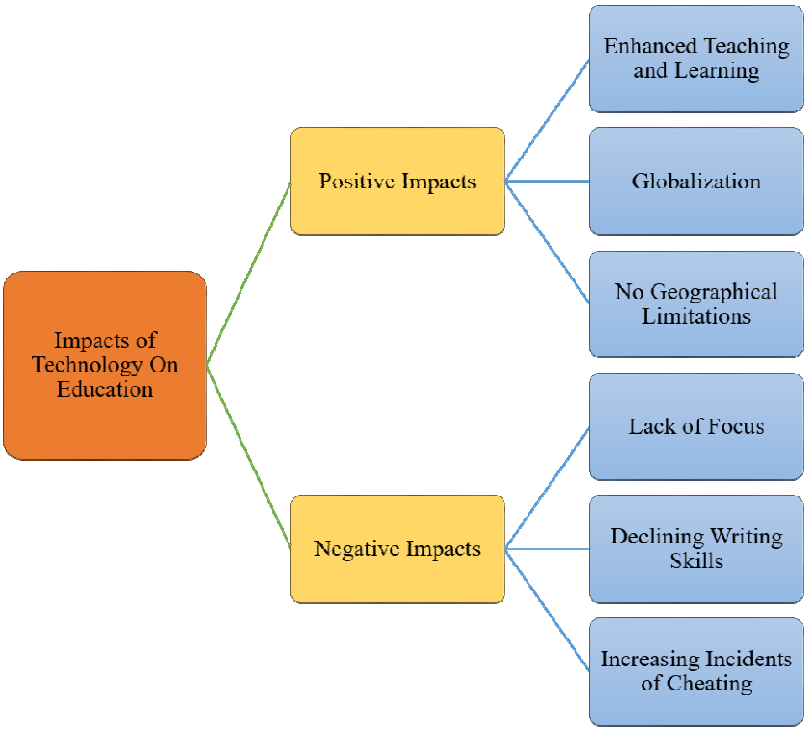

Figure 3: Illustrating the Positive and Negative Impacts of Educational Technology on Students.

2.2. Advantages of Recent Educational Technology:

- It increases children's motivation to learn.
- Allow students to work from home on their schedules and assist them with their busy schedules.
- Teach students how to develop new technology skills that they may subsequently use in the workplace.
- Lower paper and photocopy costs, supporting the idea of a "green revolution".

2.3. Disadvantages of Recent Educational Technology:

- Many experts and knowledgeable people believe that using such technology in schools harms students' ability to think critically and impairs their creativity.
- It eventually takes up a lot of the teacher's time as well.
- Using such technology is expensive.
- If consumed in excess, there might be additional health risks.

3. CONCLUSION

In conclusion, a substantial chunk of change will occur in education as a result of numerous emerging technologies. By learning about each of the following technologies, students may utilize them much more effectively. People learn different skills on how to get the most out of each application by studying each one. On the other hand, teachers may use online course platforms to improve the classroom atmosphere. The schooling institution, communication, and resources will all improve with the help of technology. We observe that there is a lot to understand when we talk about educational technology improvements since there is a growing understanding of the unique role of technology, and innovation is prepared to launch and build a new path that will ultimately bring revolution to young minds. But bear in mind

that technology has updated the whole teaching-learning activities in school. Particularly E-Learning, a teaching technology that influences students' study habits and motivation for learning in addition to promoting the accessibility and ease of education. The good news is that you don't have to sail alone on this EdTech ship since you have us on board who will work with you to highlight learning's true value, motivate students, and improve education's effectiveness. By presenting great technical information, this research aims to do this. You should be prepared to use technology as a student to better enhance your educational experience. Technology has a significant influence on education, but it may also have negative effects. Teachers and students should take full advantage of this in the bright light and decrease the drawbacks that are preventing many children and schools from being successful. Therefore, it is now necessary for every nation to create a more advanced and extensive education system in the future.

REFERENCES

[1] F. Fadli, S. I. D. Astuti, and R. Rukiyati, "Techno-resilience for teachers: Concepts and action," *TEM J.*, 2020, doi: 10.18421/TEM92-53.

[2] G. Martínez Navarro, "Tecnologías y nuevas tendencias en educación: Aprender jugando. El caso de Kahoot," *Opcion*, 2017.

[3] J. Harris, P. Mishra, and M. Koehler, "Teachers' technological pedagogical content knowledge and learning activity types: Curriculum-based technology integration refrained," *J. Res. Technol. Educ.*, 2009, doi: 10.1080/15391523.2009.10782536.

[4] V. L. Lowell and J. M. Morris, "Multigenerational classrooms in higher education: equity and learning with technology," *International Journal of Information and Learning Technology*. 2019. doi: 10.1108/IJILT-06-2018-0068.

[5] O. L. Ng and W. K. Tsang, "Constructionist Learning in School Mathematics: Implications for Education in the Fourth Industrial Revolution," *ECNU Rev. Educ.*, 2021, doi: 10.1177/2096531120978414.

[6] I. F. RAHMADI, "TEACHERS' TECHNOLOGY INTEGRATION AND DISTANCE LEARNING ADOPTION AMIDST THE COVID-19 CRISIS: A REFLECTION FOR THE OPTIMISTIC FUTURE," *Turkish Online J. Distance Educ.*, 2021, doi: 10.17718/tojde.906472.

[7] A. V. Stafeeva, L. V. Zasukhina, and D. S. Kuryatnikov, "EVALUATION OF PROFESSIONAL COMPETENCIES OF TEACHER TRAINING UNDERGRADUATES IN THE CONTEXT OF IMPLEMENTING THE UPDATED STANDARDS," *Sci. Notes V.I. Vernadsky Crime. Fed. Univ. Sociol. Pedagog. Psychol.*, 2020, doi: 10.37279/2413-1709-2020-6-3-46-55.

[8] L.-T. Chen and L. Liu, "Content Analysis of Statistical Power in Educational Technology Research: Sample Size Matters," *Int. J. Technol. Teach. Learn.*, 2019, doi: 10.37120/ijttl.2019.15.1.04.

[9] Mattharrisedd, "The Learning Technology Framework."

[10] F. Tuma, "The use of educational technology for interactive teaching in lectures," *Annals of Medicine and Surgery*. 2021. doi: 10.1016/j.amsu.2021.01.051.

[11] J. M. Fernández-Batanero, P. Román-Graván, M. M. Reyes-Rebollo, and M. Montenegro-Rueda, "Impact of educational technology on teacher stress and anxiety: A literature review," *International Journal of Environmental Research and Public Health*. 2021. doi: 10.3390/ijerph18020548.

[12] K. Jordan, R. David, T. Phillips, and A. Pellini, "Education during the Covid-19 crisis: Opportunities and constraints of using EdTech in low-income countries," *Rev. Educ. a Distancia*, 2021, doi: 10.6018/RED.453621.

[13] R. Fairlie and P. Loyalka, "Schooling and Covid-19: lessons from recent research on EdTech," *npj Science of Learning*. 2020. doi: 10.1038/s41539-020-00072-6.

[14] M. Elçiçek and H. Karal, "A framework proposal for the design of video-assisted online learning environments for programming teaching," *Elem. Educ. Online*, 2020, doi: 10.17051/ilkonline.2020.735175.

[15] Mailizar, A. Almanthari, S. Maulina, and S. Bruce, "Secondary school mathematics teachers' views on e-learning implementation barriers during the COVID-19 pandemic: The case of Indonesia," *Eurasia J. Math. Sci. Technol. Educ.*, 2020, doi: 10.29333/EJMSTE/8240.

[16] R. Alqahtani, N. Kaliappen, and M. Alqahtani, "A REVIEW OF THE QUALITY OF ADAPTIVE LEARNING TOOLS OVER NON-ADAPTIVE LEARNING TOOLS," *Int. J. Qual. Res.*, 2021, doi: 10.24874/IJQR15.01-03.

[17] A. Završnik, "Criminal justice, artificial intelligence systems, and human rights," *ERA Forum*, 2020, doi: 10.1007/s12027-020-00602-0.

[18] M. Cervenanská, “Need and importance of technology in education,” *Technol. Vzdel.*, 2013.

[19] Mod Istyak Ali, “Importance of Education Technology In TeachingLearning,” *Our Herit.*, 2020.

[20] I. R. Edara, “Importance of holistic life education amid technology paradox,” *Int. J. Res. Stud. Educ.*, 2020, doi: 10.5861/ijrse.2020.5900.

[21] A. Padilla-Meléndez, A. R. Del Aguila-Obra, and A. Garrido-Moreno, “Perceived playfulness, gender differences and technology acceptance model in a blended learning scenario,” *Comput. Educ.*, 2013, doi: 10.1016/j.compedu.2012.12.014.

CHAPTER 7

A COMPARATIVE ANALYSIS OF BENEFITS AND PERFORMANCE AMONG TOP RATED HEALTH INSURANCE POLICIES

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ABSTRACT:Health insurance is one of the most significant strategies for increasing universal healthcare coverage by improving healthcare utilization and providing financial security the expansion of India's general insurance business is mostly due to health insurance. This one alone contributes to more than a third of India's total higher insurance revenue. This sector's expansion is crucial in terms of the general insurance industry's overall expansion. At almost the same time, there are several difficulties affecting the industry's success.The author of this paper covered the different aspects that impact health insurance, as well as its benefits and drawbacks, effectively so that well-being is maintained. The performance of the Indian health insurance business is examined, as well as the various percentages of areas where individuals acquire health insurance. This paper also gives customers who wish to acquire health insurance a point of view based on certain aspects. The future scope of this paper is to identify several interventions used in India to increase health insurance awareness, as well as to offer information about the effectiveness of these interventions in increasing health insurance knowledge and adoption among Indian residents.

KEYWORDS: Insurance, Financial, Medical, Health, Healthcare.

1. INTRODUCTION

1.1.It Safeguards Your Financial Well-Being:

The most important benefit of getting health insurance is that it protects your long-term investments. You may be saving and accumulating for a specific reason, such as buying a house or paying for your child's education, but a medical emergency affecting you or a family member may force you to sell your possessions. If you're still unable to meet your financial obligations, you may need to borrow money from relatives or friends or take out a loan. All of these items can put a major dent in your present financial condition and other long-term ambitions. Due to the escalating expense of excellent treatment, getting insurance might help you prevent such results [1]–[4].

1.2.Available Options:

The days of health insurers only providing basic protection are long gone. Several modern insurance firms now offer health insurance coverage. Individuals and familial floater insurance are now available from most insurers. With or without an individual plan, you can cover yourself, however with a kinship health plan, you can safeguard your entire family's health. Other forms of health plans include ULHP (Unit Linked Health Insurance), short-term disability plan, organizational insurance coverage, personal accident plan, and hospitalization cash benefit plan, these general common choices. Because there are so many alternatives, you'll be able to find a package this best suits your needs [5]–[8].

1.3.Hospitalization Without Spending Any Money:

Amongst the most prominent benefits of health insurance is the ability to file claims without having to pay any money. The majority of big insurers currently have a nationwide network of hospitals. If you've had a medical issue and yet are brought to the hospital, you will very

certainly be eligible for prepaid hospitalization. This facility avoids the typical claim reimbursement procedure, in which you must first pay your hospital bills before being paid by your insurance company. The insurance will pay your medical fees straight to the hospital if you receive cashless treatment. As a result, consumers will not be responsible for the hefty treatment expenses. You will be charged if you are committed to a non-network hospital.

1.4.No Claim Bonus (NCB):

NCB is a bonus feature included in health insurance coverage. Every year, health plans are typically renewed by spending the insurance premium. However, you will be eligible for NCB if you do not make any claims for the full year. This NCB payment is also included in certain automobile insurance policies. There is, however, a significant difference between NCB for auto insurance and NCB for health insurance. The NCB lowers the annual rate for car insurance. The NCB, on the other hand, supplies you with a bigger sum assured for the same insurance premium when it comes to health insurance. So, if your health insurance plans cover is Rs. 5 lakhs and you don't submit a claim in a year, your coverage will be Rs. 5 lakhs [9]–[12].

1.5.Add-Ons And Riders Are Available:

There are several sorts of add-ons that may be purchased with a health insurance policy. While the add-ons increase the policy price somewhat, they greatly expand the plan's coverage. Even if you're buying a basic health insurance policy, certain add-ons can help you get the most out of your coverage. For example, many health insurance policies do not reimburse treatments for serious diseases including cancer or heart disease, or treatments for vehicle damage. You may add a critical sickness or calamity covering add-on to your policy to ensure that such exclusions are covered as well.Figure 1 illustrates the health benefits of insurance like financial stability, tax benefits, etc. Figure 2 embellish the different expenses of liabilities of the medical insurance

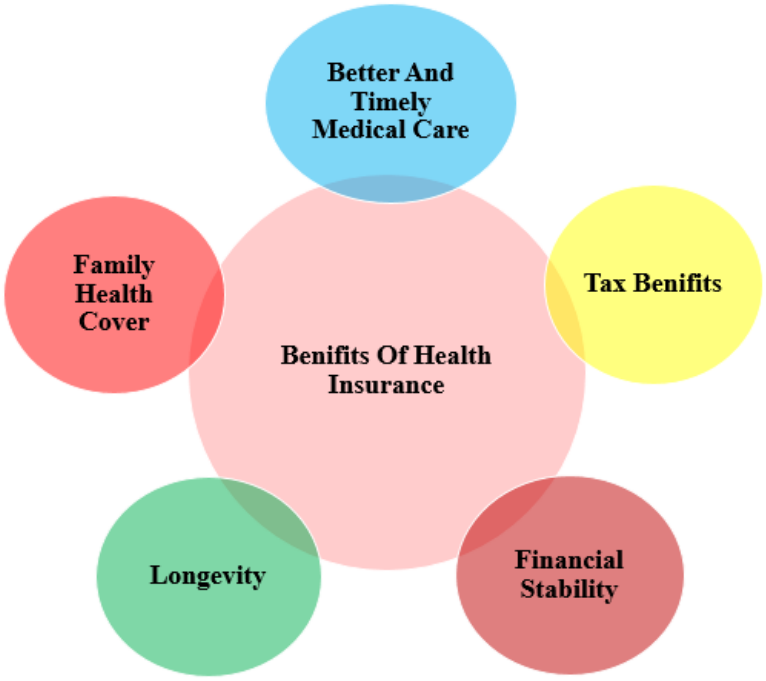

Figure 1: Illustrates the health benefits of insurance like financial stability, tax benefits, etc.

Figure 2: Embellish the Different Expenses of Liabilities of the Medical Insurance.

1.6.Benefit From Taxes:

In India, a huge percentage of people get health insurance just for the tax benefits it provides. While a tax credit should not be the primary motivation for purchasing medical coverage, it is still a major benefit. An individual under the age of 60 can receive a credit of up to Rs. 25,000 for premiums spent on health insurance under Section 80c Tax Act. This same deductible limit is Rs. 50,000 if you are over the age of 60. If you have additionally acquired health coverage for our around 60-year single mom, there is an extra tax-deductible of Rs. 125,000. If your parents are over the age of 60, you are eligible for a deduction [13]–[15].

1.7.Mindfulness:

Another big advantage of health coverage is the assurance it provides. When you receive health insurance, specifically if you have a family coverage plan, you get a big sense of security. You may rest easy knowing that your healthcare, as well as that of your family, is fully protected. If you've had a health plan, you won't be worried about healthcare expenditures, and you'll be able to choose the best proper help for you and your family. Treatment that is of high quality can also speed recovery, allowing you to regain your prior physical condition sooner than people think. Figure 3 illustrates the percentages of different places that are buying health insurance.

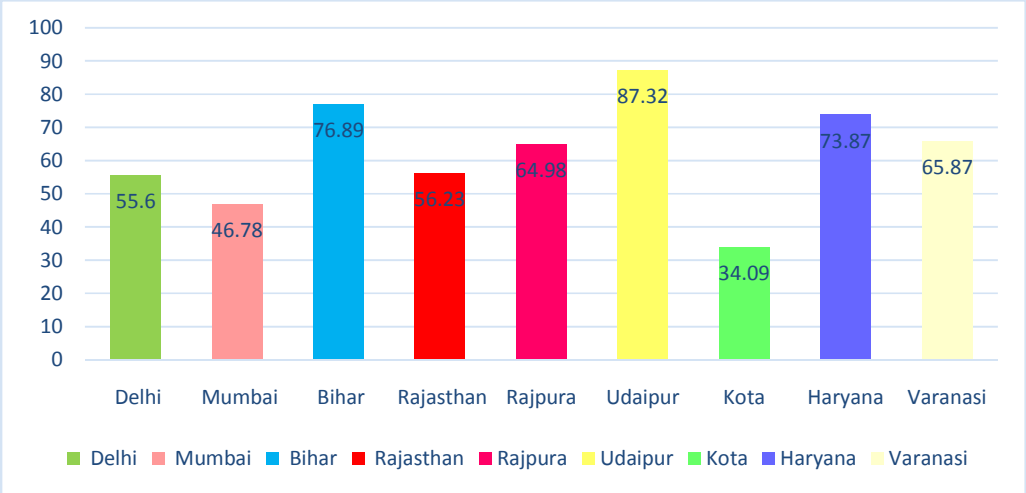

Figure 3: Illustrates the percentages of different places that are buying health insurance.

2. LITERATURE REVIEW

Pareek, Manoj in their study embellishes that In India, the health insurance industry seems to have become the fastest expanding area of the non-life insurance business. Pareek and Manoj applied a methodology in which they stated that In FY 17, the healthcare business in India grew by 64%, with premiums totaling INR valid points and a market share of 56%. According to the findings, it has been the fastest-growing market sector over the past 10 years, with a CAGR of 23%. With only 67 percent of the population insured, the health insurance sector is still in its infancy. The author concludes that Health insurance has a significant potential for expansion and penetration among a vast population. In terms of marketing and promotion of health care insurance products in India, there are both possibilities and challenges ahead. The purpose of this research is to investigate the chances of effective marketing of such items [16].

Dr. Rana Rohit Singh and Abhishek Singh in their study illustrate that In Germany, health insurance was first established in 1884. It began as a sickness and accident insurance policy. Dr. Rana Rohit Singh and Abhishek Singh applied a methodology in which they stated that the First World War, was recognized by the United Kingdom, France, and the Soviet Union. The results show The United Kingdom was the first state in the world to make health insurance mandatory for its residents. The author concludes that service was provided at a low cost, Before 194, there was no defined service or laws for wellness insurance in India. Because both the 1912 and 1938 insurance acts were focused on life insurance, none established any explicit rules or direction for health insurance. In India, the state insurance plan was established in 1948. India's national government has run a health insurance program [17].

A. Jain et al. in their study embellish that to learn about the acceptability of neighborhood health insurance coverage in rural India, as well as the readiness to pay for it. Jain et al. applied a methodology in which they used a mixed-methods approach to interview 76 people from eight communities in southern India. The family's health-seeking habits for care delivery, community consumption of care delivery, interest in from before the health insurance, and readiness to pay for a real product were among the interview areas. The results show the majority of respondents said they would seek medical attention only if symptoms were apparent; only six said they were aware of the necessity of preventative services. The author concludes that none of the participants said they had become impoverished as a result of medical expenses. Few people saw health insurance as vital, either because they didn't want to be trendsetters, even though they had other financial resources, or because they had been concerned about the cost [18].

Our study states that health insurance has a lot of room for growth and penetration among a large population. There are both opportunities and difficulties ahead in terms of marketing and promotion of healthcare insurance products in India. The study looks at the possibilities for effective marketing of such things.

3. DISCUSSION

3.1.It All Depends On How Old You Are:

As you become older, you're more susceptible to ailments, which means your medical bills will skyrocket. Because the insurance company must cover this risk, you will be charged extra. This is true of all healthcare insurance firms. Mediclaim premiums do not stay the same during the policy period, unlike term insurance. It may be the same scene between the

ages of 18 and 35, but after you reach the ages of 36 and 45, your healthcare insurance premium will rise as well.

3.2.Whether You're A Smoker Or Not:

Smoking increases the risk of deadly illnesses such as heart and lung disease, asthma, and cancer. If you smoke more than 10 cigarettes a day, some insurance providers will refuse your application, while others will charge you more in healthcare premiums. Insurance coverage is sold in due diligence, and it is assumed that if a person uses tobacco, he or she will reveal it willingly. If the health insurer learns about this now or later, the policy may be terminated.

3.3.Whether Or Not You Provide Any Pre-Existing Conditions:

If you've had a pre-existing ailment, your chances of being admitted to the hospital and incurring medical costs are higher. This risk will have to be covered by the medical insurance company. Pre-existing diseases are now handled differently by different health insurance providers. Some companies impose a waiting time or a co-payment requirement, while others raise the Medicare advantage cost. It might also be both. Declare any pre-existing conditions when acquiring insurance coverage. If the insurance carrier discovers it later either during the operation, the claim may be denied.

3.4.Whether It's A Floater Or Individual Insurance:

A houseboat policy covers the entire family for health insurance. Because it encompasses more than one individual, the likelihood of hospitalization rises as well. These costs will be covered by health insurance companies. As a result, the premium is likewise higher. If you've had Rs 10 lakh convertible insurance, your payment will be higher than if you had a Rs 10 lakh insurance policy.

3.5.Which City Do You Call Home:

Medical costs vary depending on where you live. Hospitalization costs, for example, will always be higher in places like Delhi or Mumbai than in smaller towns. As a result, the general liability policy premium will be higher. When purchasing health insurance coverage, whether offline or online, it is necessary to specify the city you belong to, which may or may not be your official location.Figure 4 illustrates the different factors that are affecting health insurance like city, age, etc. Figure 5 illustrates the things to consider before buying health insurance.

The primary advantage of purchasing health insurance is that it safeguards your long-term investments. You may be spending and accruing for a set purpose, such as purchasing a home or funding your child's school, but a disease outbreak involving you and perhaps a sibling may compel you to sell your belongings. One of the most important techniques for expanding universal healthcare coverage is to improve healthcare utilization while also ensuring financial stability. The expansion of India's general insurance business is mostly due to health insurance. This one alone contributes to more than a third of India's total higher insurance revenue. The increase in this sector is crucial for the general insurance industry's overall expansion. Until it starts to damage their revenue, everybody else in the healthcare business likes the idea was to making our systems more effective and cost-effective. In a nutshell, any sort of health care legislation will inevitably meet tremendous internal opposition. Much of that money is getting a bunch of people who will fight fought hard to keep everything they are.

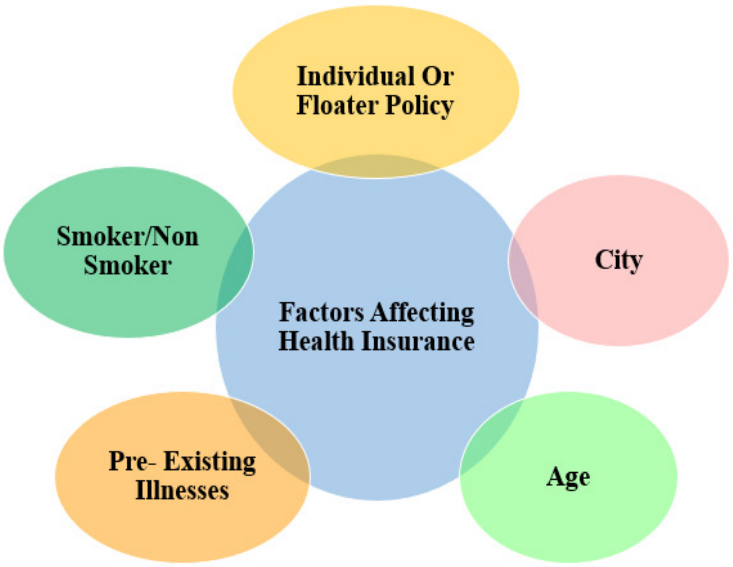

Figure 4: Illustrates the different factors that are affecting health insurance like city, age, etc.

Figure 5: Illustrates the things to consider before buying health insurance.

4. CONCLUSION

REFERENCES

[1] M. H. Meitei and H. B. Singh, "Coverage and correlates of health insurance in the north-eastern states of India," *J. Heal. Res.*, 2021, doi: 10.1108/JHR-07-2020-0282.

[2] S. Prinja, M. Kaur, and R. Kumar, "Universal Health Insurance in India: Ensuring equity, efficiency, and quality," *Indian J. Community Med.*, 2012, doi: 10.4103/0970-0218.99907.

[3] B. Purohit, "Community Based Health Insurance in India: Prospects and Challenges," *Health (Irvine. Calif).*, 2014, doi: 10.4236/health.2014.611152.

[4] M. Ghosh, "Mental health insurance in India: lack of parity," *The Lancet Psychiatry*. 2021. doi: 10.1016/S2215-0366(21)00287-X.

[5] D. Kundu *et al.*, "Analysis of multi drug resistant tuberculosis (MDR-TB) financial protection policy: MDR-TB health insurance schemes, in Chhattisgarh state, India," *Health Econ. Rev.*, 2018, doi: 10.1186/s13561-018-0187-5.

[6] A. Karan, W. Yip, and A. Mahal, "Extending health insurance to the poor in India: An impact evaluation of Rashtriya Swasthya Bima Yojana on out of pocket spending for healthcare," *Soc. Sci. Med.*, 2017, doi: 10.1016/j.socscimed.2017.03.053.

[7] P. K. Pandey, "Demystifying Insurance Regulatory Changes Relating to Commercial Health Insurance in India," *SSRN Electron. J.*, 2019, doi: 10.2139/ssrn.3019118.

[8] P. Panda, A. Chakraborty, and D. M. Dror, "Building awareness to health insurance among the target population of community-based health insurance schemes in rural India," *Trop. Med. Int. Heal.*, 2015, doi: 10.1111/tmi.12524.

[9] S. Gupta and P. Tripathi, "An emerging trend of big data analytics with health insurance in India," 2016. doi: 10.1109/ICICCS.2016.7542360.

[10] S. D. Bhaduri, "Ayushman Bharat and Universal Health Coverage in India: Is our approach ethical?," *Indian J. Med. Ethics*, 2021, doi: 10.20529/IJME.2021.016.

[11] R. Y. Gupta, S. S. Mudigonda, P. K. Baruah, and ..., "Markov model with machine learning integration for fraud detection in health insurance," *arXiv e …*, 2021.

[12] S. R. Mahapatro, "Socioeconomic inequality in healthcare utilization in India: Is health insurance a way out?," *J. Popul. Soc. Stud.*, 2020, doi: 10.25133/jpssv28n1.006.

[13] B. Azuogu and N. Eze, "Awareness and Willingness to Participate in Community Based Health Insurance among Artisans in Abakaliki, Southeast Nigeria," *Asian J. Res. Med. Pharm. Sci.*, 2018, doi: 10.9734/ajrimps/2018/42839.

[14] Garge, S. Tare, and S. Das, "A study on consumer's understanding of health insurance benefits," *J. Dent. Res. Rev.*, 2020.

[15] V. P. Shijith and T. V Sekher, "Who Gets Health Insurance Coverage in India? : New Findings From Nation-Wide Surveys," *IUSSP Int. Popul. Conf.*, 2013.

[16] M. Pareek, "Prospects for growth and issues in marketing of health insurance in India," *J. Manag. Res. Anal.*, 2020, doi: 10.18231/2394-2770.2018.0047.

[17] A. S. Dr. Rana Rohit Singh, "A Study of Health Insurance in India," *Int. J. Manag. IT Eng.*, 2020.

[18] A. Jain, S. Swetha, Z. Johar, and R. Raghavan, "Acceptability of, and willingness to pay for, comm

CHAPTER 8

IMPACT OF COVID-19 ON THE ACCESS AND INCLUSION OF HIGHER EDUCATION IN INDIA

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ABSTRACT: ***The five pillars of New Education Policy (NEP) - accessibility, equity, affordability, quality, and accountability - have been constantly discussed and inputs gathered from various stakeholders are used to review the policy decisions. This paper attempts to review the access and inclusion of higher education in India, particularly in light of the recent pandemic impact. The first section emphasizes the policy of aligning higher education in India with the objective of access, quality, and equity. The approach has been to ensure inclusive, participatory, and holistic methodologies which take into account lessons learned, stakeholder feedback, empirical research, field experiences, and expert opinion from the best practices. The second section projects the demand and supply side of higher education in India based on the demographic profile and the number of higher education institutions in India. The third section analyses the access to higher education based on the gross enrollment ratio which is comparatively below the global average and peer countries. The fourth section attempts to find a solution to the problem of low gross enrollment and regional disparities. The threefold strategy envisaged includes larger participation of foreign universities, enhancing the number of quality private institutions, and increasing online and distance learning. The final section points to the pandemic impact of higher education access and suggests measures to overcome the disruptions. The methodology makes use of empirical secondary data from the National Population Survey and MHRD, GoI for the analysis.***

KEYWORDS: ***COVID-19, Education, Educational Institutions, Higher Education, India.***

1. INTRODUCTION

Food and pharmaceutical shortages for the underprivileged and homeless were the first crises when the COVID-19 epidemic struck India in early March 2020. The importance of education didn't become apparent until later. After a brief interruption, the majority of instructional activities were switched to "online mode". Although the changeover 2 was abrupt, those who had the resources found it handy. For many others, nevertheless, getting an education has become dependent on their socio-economic status. The "Right to Education," a constitutional right granted to all children in India between the ages of 6 and 14 years, was therefore entirely lost to almost 7.8 million CWD (Chronic wasting disease), notably those with minor to severe disabilities and the financially poor.

The foundations of scientific innovations, fresh knowledge, creativity, and entrepreneurship that lead to the development and wealth of a person as well as a country involve the availability of high-quality education [1]. The goal of the policy to raise the standard of education has been to make the pedagogy and curriculum appropriate to societal requirements and to foster from an early age problem-solving, innovative thinking, education through doing, and increased interaction with real-world situations. The creation of a national education strategy is prioritized to increase access, enhance the standard of educational institutions across the board, promote gender parity, and include marginalized groups including SC/ST, minorities, and financially deprived segments of society. The mapping of India's higher education system will be in line with the goals of access, quality, and equity by

offering financial assistance in the form of free ships, scholarships, incentives, and mortgages to deserving students from marginalized sections of society and encouraging international cooperation in the field of education [2]–[6].

By providing students with the abilities and knowledge they need, the policy seeks to address the changing dynamics of the population's demand for quality education, innovative thinking, and scientific studies. It also aims to make India an expertise superpower by eradicating the shortage of workers in the fields of science, future technologies, academia, and related industries. The approach has been to ensure inclusive, participatory, and holistic methodologies which take into account lessons learned, stakeholder feedback, empirical research, field experiences, and expert opinion from the best practices.

1.1.Impact on Higher Education

Due to COVID-19, state governments started closing schools and institutions nationwide during the second week of March 2020. We all know that this was an important time for students since many university and college exams were to be conducted at this time, along with several entrance exams for various colleges and competitive exams. And since there was no quick way to stop the COVID-19 epidemic, it was necessary to make college, school, and university closures mandatory to stop the virus's spread. More than 285 million young students in India have been impacted. Students, particularly those in their last year and those taking the entrance exam, had to deal with serious issues since they were unaware of the upcoming exams. Due to the disruption caused by the shutdown of academic institutions, the Indian higher education system is now experiencing an unrecoverable catastrophe in both learning and teaching. Thus, the conventional face-to-face classroom technique was abruptly replaced by the online style of instruction. Just as yesterday's disruptors turned into today's survivors, so it went. Online methods were formerly seen as a danger, but they are now helpful. Nevertheless, the adoption of the online form of instruction in higher education institutions has brought about several problems (HEIs) The effectiveness of online learning is one of the key questions that come up. The short answer is that it works for those who have access to the correct technology. The internet is very important for improved education and learning. Nevertheless, in a nation like India, it is unrealistic to assume all students have access to all the necessary resources due to the wide socioeconomic divide that exists. As a result, there is a digital divide between the wealthy, who can access all the resources, and the underprivileged, who cannot afford to buy the necessary equipment for e-learning. As a result, several individuals in India lack access to high-speed internet, which is necessary for learning and teaching processes and is often not available to them. India still has to deal with the problem of the digital divide. The absence rate and subpar performance in the online classrooms have grown due to the lack of student participation. Nevertheless, one of the main causes of the ineffectiveness of online learning and teaching is the students' passive behavior in the classroom [7]–[9].

1.2.Demand and Supply of Higher Education in India:

In 2020, India has a total population of 132. 61 crores which constitute a 17.70 percent share in the world population of 779.48 crore people. Around 50 percent of India’s population remains below the age of 25 and 65 percent below 35 years of age. The average age of India’s population is 29 years against China and Japan with an average age of 35 and 48, respectively. The average fertility rate is 2.35 per woman and the birth rate and death rate at 18.2 and 7.3 per 1000 respectively, the average density of population in India is 464 per Sq. Km. Its urban population is about 35 percent [10]. Figure 1 presents the age-wise decomposition of India’s population in percent which reveals that India’s population is

slowly trending to age. Whereas the percentage of the population in the age group 0-14 at 25.78 percent indicates the demand side of higher education access [11], [12].

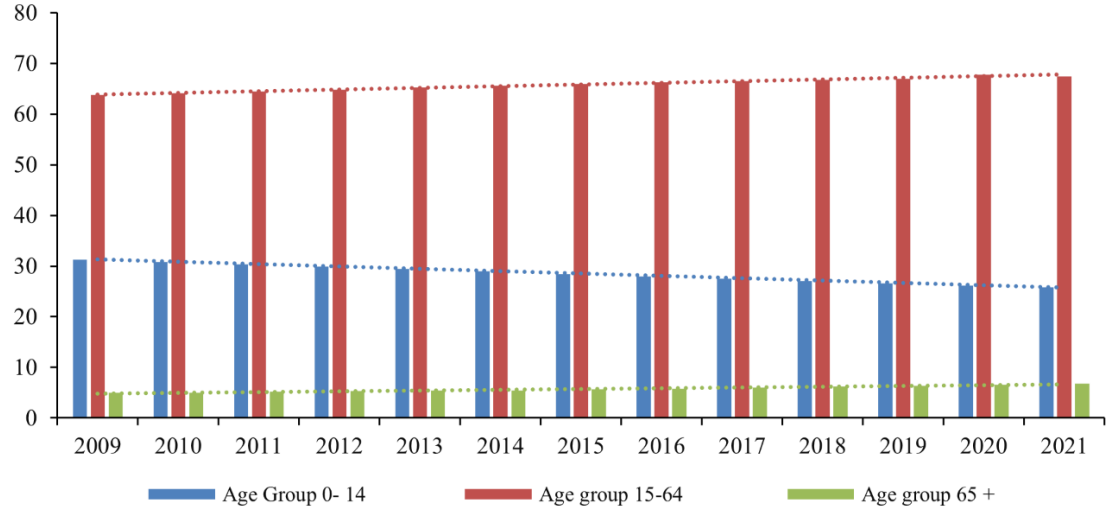

Figure 1: Representing the Demographic Profile of India (in percent) [1]**.**

It is interesting to observe the demographic forecast for India until 2050 indicating a huge increase in population which will require an accelerated increase in expenditure on education as a percentage of GDP. While China ranks the highest in terms of population with 143. 97 crores in 2020, India would outnumber it with the first rank in 2030 with 150.36 crores population (Figure 2). India's population in 2050 will have crossed 163 crores pushing the demand for education at primary, secondary, and higher education levels [13].

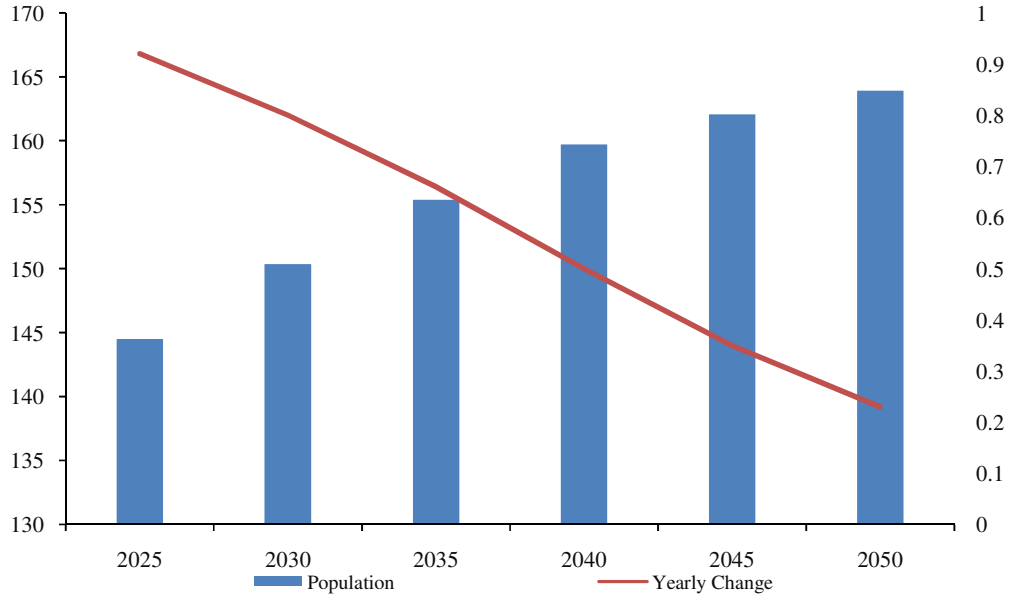

Figure 2: Representing the Demographic forecast for India (in numbers) [1]**.**

Looking at the supply side of higher education, India has over 1000 universities. As per data from MHRD, in 2019, India had 334 Private Universities, 125 Deemed-to-be Universities, 402 State Universities, 50 Central Universities, 7 Institutes, and the State Legislature Act, and 155 Institutions of National Importance such as IITs, AIMS, IIMs, IIITs, IISER, NITs.

Besides, India had 52,627 Standalone institutes, Private Degree Colleges, Government Degree Colleges, and postgraduate research institutes (Figure 3).

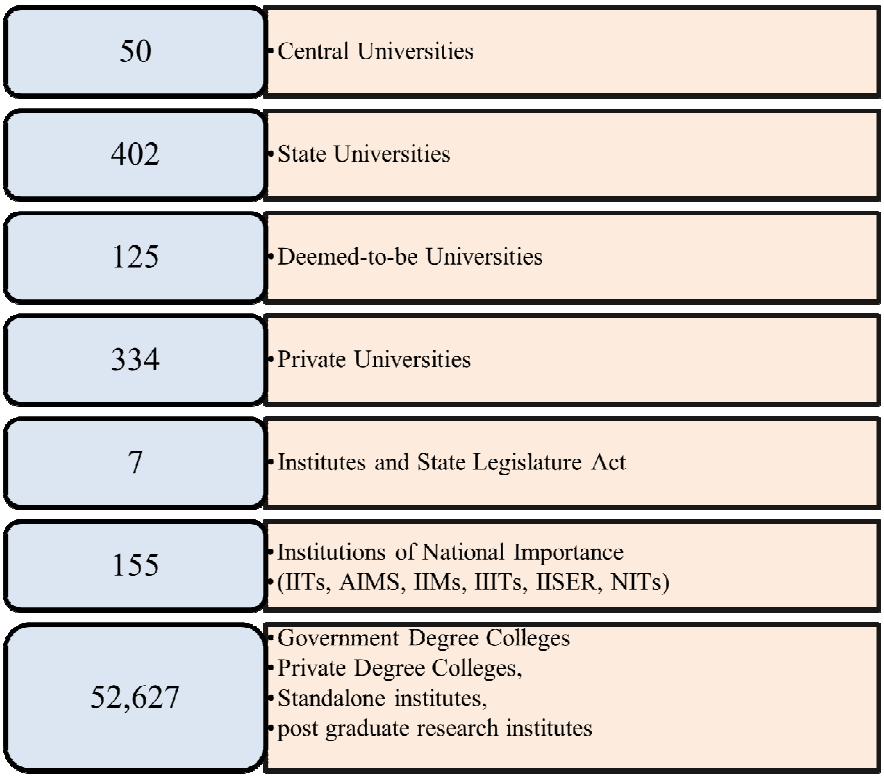

Figure 3: Representing the Supply of Higher education in India (in numbers) [1]**.**

1.3.Access to Higher Education in India

The Gross Enrollment Ratio (GER), which measures the proportion of people enrolled in higher education to the general population between the ages of 18 and 23, is used to assess access to higher education. There are different sources of data such as MHRD, NSS, and Census surveys.

The GER which stood at 0.7 percent in 1950-51 increased to 1.4 percent after a decade in 1960-61. The gross enrollment in higher education stands at 26.3 percent as on 2018-19 which is drastically lower than the global average of 36.7 percent and 55 percent in developed countries.

Between 1996 and 2001, India and China had a similar GER of 9.76 percent. While China had doubled its GER to 20 percent by 2006, India had increased just by 2 percent to 11 percent. China's dramatic GER rise was due to increased higher education funding in the last two decades. In 2020, China's GER stands at 43.4 percent. Higher education funding in India was around 0.6 percent of GDP in 2009 which stood lower than 1.5 percent which was recommended by the National Knowledge Commission.In absolute terms, it was ₹ 130 billion in 2011-12 (Figure 4) [1].

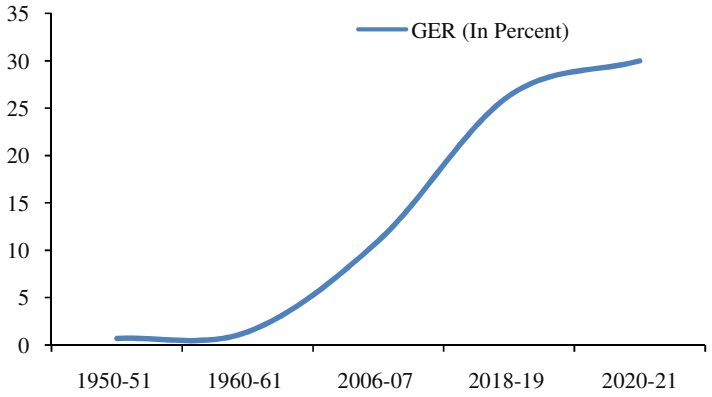

Figure 4: Representing India's Gross Enrollment Ratio (in percent of Population) [1]**.**

India has a dual problem in higher education – lower GER and higher interregional disparity in GER. Literature indicates variations in GER across the states. All India's average was 11 percent whereas it was lower in Jharkhand, Tripura, Sikkim, Rajasthan, Mizoram, Meghalaya, MP, Bihar, and Arunachal Pradesh. At least 20–25 percent of the population must participate in higher education for there to be sustainable economic development. Therefore, India requires a multiple expansion of capacity in higher educational institutions. The dual strategy for this includes an additive increase in the number of new vocational and technical institutions and colleges and enhancing the intake capacity of the existing educational institutions.

How many more universities and colleges does India need? This is an issue not empirically addressed so far. If we assume 20000 students per university, India needs 735 additional universities.If we assume 30000 students per university, India needs 378 additional universities. Using population as a criterion, 2 lakh students per university (10 colleges per one lakh population) additional 11,699 general colleges would have been required in the 11th plan. Today, we need to triple the count of our university fleet and more than double the number of colleges to accommodate 43 million students accessing higher education. India needs 800 – 900 more universities and 40000 - 45,000 colleges within the next decade. This is not what the government can do.

2. DISCUSSION

2.1.Solving the Problem

So what is the solution? The policy for expanding the GER in higher education in India should involve three strategies - encourage partnership with foreign universities, promote high-quality private institutions and improve access to education via distance and online learning. Unlike China's growth trajectory was based on manufacturing success, India's economic growth should focus on skilled manpower. India's main asset is human capital – a growing collection of technicians, engineers, scientists, and the highest knowledge workers in the world. The number of engineering graduates in India is around 400,000, whereas in the US it is 60,000. For the continued competition, India must improve and broaden the availability of higher education to increase its pool of qualified employees.

The expansion of universities and colleges in India will increase chances for both Indian and international students since the liberalization and privatization policies of 1991 contributed to the expansion of the Indian economy as a whole. In 2010, India created a policy to welcome international universities. But the Parliament has yet to approve the Foreign Educational Institutions Bill. In India, foreign universities are present via research collaborations and dual

degree programs. 600 such institutions operating in the country since 2000 and 144 foreign universities from the UK, Canada, and the US.

Private Institutions are encouraged through tax and financial benefits.More than half of student enrollment is in unaided private educational institutions. Increasing access to online modes of higher education and distance education through ICT can reduce the cost of education. There are about 144 institutions that offer online distance learning. The National Portal on Technology Enhanced Learning (NPTEL) has offered 260 online courses in phase 1 and more than 1000 courses are proposed in phase 2.

It is interesting to see where India has moved in higher education access. Education in India had moved evolved from Vedic mode to colonial legacy under the Government of India Act in 1935. Since independence, the attempt was to Indianisation of higher education. Of late, the importance of vocational education has been rising. In 1949 India had 2, 41,369 students, 20 universities, and 496 colleges. In 2020, 27.3 million students have enrolled in an undergraduate program, 4.5 million in an engineering field, 500,000 engineers graduate annually, 1.2 million scientists, 50,000 computer scientists, and 350,000 diploma holders graduate in India. Across the country, the compounded annual growth rate in gross enrollment was 3.5 percent in 5 years preceding 2016. The current enrollment is 26.3 percent. The challenge for increasing GER is manifold such as finance, regional disparities, accreditation, politics, and capitation fee.

2.2.Initiatives are taken to make the Educational System Learner Friendly:

Even though COVID-19 had many detrimental effects on education, it also gave India's teaching and learning processes a fresh perspective. Online education has a lot of disadvantages, yet it managed to endure through the toughest times for the nation. Digital literacy was improved. People began to study and use digital technologies. Information was distributed throughout the globe via electronic media. Teachers and students both have excellent opportunities to communicate with individuals from across the world. Because it promotes self-learning, students favored the open and distance learning (ODL) form of instruction. The HEIs responded well to the crisis by using various tactics. To encourage learning, UGC and MHRD have also provided learning and teaching resources accessible to students [14]. Throughout the COVID situation, certain digital efforts have proven to be quite successful. The following is a list of some of them:

- E-Gyankosh - One of the national government's projects to distribute digital learning materials were created by the nation's open and remote learning institutions. Students get access to study materials as well.
- Gyandhara – It is an online service that allows students to connect with professionals via telephone conversations while also listening to their live discussions.
- Swayam - SWAYAM reportedly offers over 1900 courses for both secondary and postsecondary education. The Goa government made the difficult decision to launch a brand-new E-Learning platform named DISHTAVO (Digital Integrated System for Holistic Teaching & Virtual Orientation).
- DISHTAVO - During the COVID crisis, a specialized e-learning platform under the name of Dishtavo was created. It impressively handles the many study packages offered by Goa University at the UG and PG degree levels, including B.A., B.COM, B.Sc., and so forth, making it highly complicated and comprehensive. It has been created following the standards established by SWAYAM for MOOCs to improve the student experience and make that platform more learner-centric.
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3. CONCLUSION

The pandemic has brought a big challenge to higher education access. In times of loss of life and livelihood, the country's education access can take a backseat. In the time of lockdown and uncertainty of vaccine invention, there could be a gap year in higher education. The only solace is the online mode of learning. What should the government do? Giving free internet access is the need of the pandemic times.Giving subsidies for laptops, mobile phones and TV for unaffordable young graduates is a must. Broadcasting daily course lessons through television and conducting online modes of assessment and evaluation is a must. These are humble steps that can arrest the impact of the pandemic on higher education access. We must understand education is a merit good and the marginal cost of the internet will be declining as millions of young generations access it for higher education. Moreover, return on investments to the economy through demographic dividend and the human capital asset will increase by free-shipping the internet along with scholarships. Unlike developed countries having abundant economic resources and developed education systems in place, the plight of developing countries like India with scanty resources and unprepared healthcare systems to confront the catastrophic impact of the contagion can be dismal. With average higher education expenditure to total expenditure in India is less than 1.6 percent of GDP and over 50 percent of the total higher education institutions in the private system remain the primary source of higher education for 55 percent of households. India has a long way to go to achieve the millennium development goals prescribed by UNESCO. We must accept that the virus is the new normal and facilitate to return to the academy in whatever way possible. We should return to doing what we were doing in higher education before the virulent attack of the pandemic. If we do not gradually and progressively move ahead, the loss of GDP due to the loss of demographic dividend and returns from human capital will be more than from the pandemic.

REFERENCES

[1] Government of India, "Ministry of Education." .

[2] C. P. Kaushal, "Impact of COVID-19 on Higher Education in India: Lessons Learned and Mitigation Measures," *J. Nature, Sci. Technol.*, vol. 1, no. 1, pp. 10–13, 2021.

[3] P. G. M, "Impact of COVID-19 on Higher Education in India – An Analysis," *Shanlax Int. J. Arts, Sci. Humanit.*, vol. 8, no. S1-Feb, pp. 301–304, 2021.

[4] S. Thakur and U. Kundu, "COMBATING THE IMPACT OF COVID-19 ON HIGHER EDUCATION SECTOR IN INDIA," *Towar. Excell.*, pp. 250–258, 2020.

[5] M. S. S K, "IMPACT OF COVID-19 ON E-LEARNING AT HIGHER EDUCATION IN INDIA," *Towar. Excell.*, pp. 184–191, 2021.

[6] B. P. Valsaraj, B. More, S. Biju, V. Payini, and V. Pallath, "Faculty experiences on emergency remote teaching during COVID-19: a multicentre qualitative analysis," *Interact. Technol. Smart Educ.*, vol. 18, no. 3, pp. 319–344, 2021.

[7] S. Mohanty, "Impact of Online Courses on Higher Education in India," *Int. J. Res. Appl. Sci. Eng. Technol.*, vol. 8, no. 9, pp. 196–199, 2020.

[8] B. C. Ravi, "'Impact on covid-19 in higher education system in India,'" *Acad. An Int. Multidiscip. Res. J.*, vol. 11, no. 7, pp. 306–311, 2021.

[9] R. Eri, P. Gudimetla, S. Star, J. Rowlands, and A. Girgla, "Digital resilience in higher education in response to covid-19 pandemic: Student perceptions from asia and australia," *J. Univ. Teach. Learn. Pract.*, vol. 18, no. 5, 2021.

[10] C. Paramasivan and K. Kumaresan Full, "DEMOGRAPHIC PROFILE OF YOUTH IN INDIA DEMOGRAPHIC PROFILE OF YOUTH IN INDIA Assistant Professor of Commerce &," 2016.

[11] S. S. Ravi, "Impact of privatisation of education in Indian Society," *J. Cult. Soc. Dev.*, 2015.

[12] E. Ramsey, E. Z. Berglund, and R. Goyal, "The impact of demographic factors, beliefs, and social influences on residentialwater consumption and implications for non-price policies in urban India," *Water (Switzerland)*, vol. 9, no. 11, 2017.

[13] A. K. Tiwari, B. P. Singh, and V. Patel, "Population projection of India: An application of dynamic demographic projection model," *J. Crit. Rev.*, vol. 7, no. 7, pp. 547–555, 2020.

[14] R. Development, "National education policy 2020," *Econ. Polit. Wkly.*, vol. 55, no. 31, p. 4L, 2020.

CHAPTER 9
COMPARATIVE ANALYSIS OF ONLINE LEARNING VERSUS CLASSROOM LEARNING FOR BETTERMENT OF EDUCATION

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ABSTRACT: ***In last two years, COVID-19 dangerous pandemic has affected the overall teaching as well as entire learning procedure in all the educational institutions all around the world. This one has put educational organizations under that same strain in terms of their ability to cope with that kind of a sudden calamity. Throughout the epidemic in India as well as other parts of the world, online education has become the primary mode of teaching as well as learning. The author's investigation one goal was to determine faculty as well as pupil perspectives of digital training throughout this aspect. Zoom, the google classroom application for online-interactive classrooms, as well as WhatsApp for contact with pupils from the outdoor classroom were found to be the most popular virtual venues throughout India as well as in other nations, according to the study. This paper offers a thorough discussion on the impact of digital learning versus classroom training for the betterment of education. Teachers, as well as pupils, believed that online learning remains beneficial during this present epidemic, according to this survey. At a very similar moment, it's indeed effective when compared to face-to-face studying as well as training. In the future, researchers may conduct more studies and know the opinion of the teachers and students regarding online education versus classroom-based educational methods.***

KEYWORDS: ***Classroom Learning, Education, Online Learning, Student, Teacher.***

1. INTRODUCTION

Humans are already presently living inside the technological period of the 4th technological transformation. Society is grown increasingly linked as technologies are changing important business operations, eroding this border separating private as well as business lifestyles as a rising variety of professions including enterprises are becoming the logistically flexible. Gradually but progressively, this same business education sector has been endeavored for adaption to such kinds of altering requirements trends, posturing its entire sets of the objects. Remote schooling, as well as digital teaching, flourished because Covid-19 altered the globe as well as the educational scene with that as well, prompting issues regarding the contrasts amongst disciplines. The five contrasts between digital and traditional training are discussed throughout this paper [1]–[3].

While comparing different diverse teaching-learning methods, the greatest evident distinction is indeed the seeming absence of personal connection, nevertheless, it isn't exactly accurate. 'Zero personal contact' might be a better approach to put it. Teacher education entails actual contact with just an instructor as well as students, whereas digital training includes electronic contact. Thus, whilst there is the actual connection, this would take place digitally within complete forms of the virtual presentations, electronic discussions, as well as face-to-face camera seminars, amongst varied things. Learners could download educational material including curriculum information, projects, teaching slides, webinars, including video meetings at any moment throughout college education when they take online classes. Modular instructors for university courses have always been available to answer concerns via email, and texts, including Webcam sessions [4]–[6].

Academic education, whether for secondary or degree programs, requires a pupil to go to a physical venue and communicate with instructors in person throughout set times. This might be constricting, particularly for workers on the go. Regarding University programs, Web-based learning participants may organize the education about existing timetables as well as put novel theories into effect right away by adapting them to their present job. It is not always this same situation throughout community college instructional strategies. Because learners must abandon both jobs as well as societal values to complete a bachelor's course, individuals would only be capable of putting their newfound skills into effect after those who have returned to employment [7]–[9]. Figure 1 illustrates the major variance in-between online-learning as well as in classroom learning.

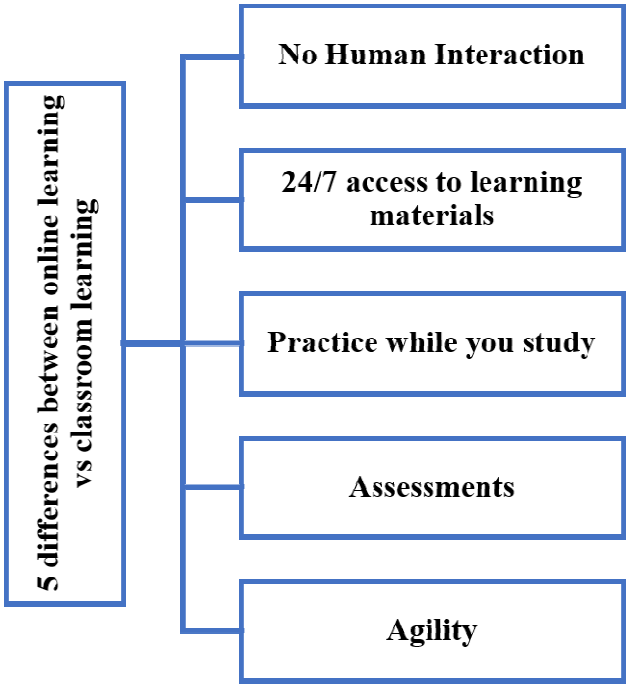

Figure 1: Illustrates the major variance in-between online-learning as well as in classroom learning [Source: Google].

Many Virtual Training programs, as well as applications for institutions and young pupils, assist them to comprehend ideas to a higher degree by presenting issues that people could engage with as well as resolve in a variety of methods. For instance, logical problems or arithmetic problems are not as simple as 'resolve for x variable' as they seem to be in most classrooms. Questions as well as examinations, more typically in some kind of a practical environment proctored by someone with an inspector, are used in the Classroom Teaching technique of testing a learner's competencies. This technique of evaluation has been rendered (possibly) obsolete by Covid-19. Examinations within Web-based education are done through projects, which could be individually or team-rooted, allowing learners to join studying communities that encourage one another as well as a benefit through their diverse perspectives [10], [11].

Internet, open-book examinations are sometimes utilized as just an evaluation method in uncommon situations, but the alternative is generally increasingly prevalent. Textbooks may be accessible virtually any place throughout the globe, independent of geographical regions, the participant's present position, or their present state. Whether it's a crowded working specialist studying digitally earlier than usual at night or perhaps a remains home mom

pressing upon her skills before actually re-entering the workforce, digital training offers much versatility to research as well as complete an extent at one 's possess speed. Since colleges realize the contemporary workforce's requirement for training, research, including growth, virtual courses with a variety of specialties have been designed to meet the needs of individuals across diverse disciplines, sectors, and worldwide perspectives. These associate United Kingdom (UK) institutions have an international presence, giving comprehensive distant education programs to international locations, so attending a location to complete the curriculum that's no more required. Pupils must have self-motivation to complete their projects as well as graduation needs to complete on schedule, which is instilled in them by the virtual form of education. Virtual learners may be certain that with a modest time as well as perseverance, students will be able to complete the graduate program effectively. At Stafford University, teachers strive to support learners in selecting the appropriate curriculum as well as effectively looking to join countless others learning the very same certification throughout the globe. Throughout the year March 2020, the COVID-19 pandemic was designated a worldwide epidemic [12], [13].

It influenced every aspect of society, especially schooling. Colleges including academic institutions were forced to close as a result. The educational organization was put under a lot of pressure to deal with the rapid evolution between conventional to digital education as a result of the shutdown. This pandemic prompted innovative approaches to the internet education. In which the media of instruction has transitioned into something like synchronized or asynchronous forms, many governments have set limits. In more than 180 nations throughout the globe, the much more significant academic institution disturbance in heritage has occurred. Educational institute closures have affected up to 99.95 percent of the world's largest learner populace in lower- and middle-income countries (according to the report by The Economic Times, in the year 2020). This COVID-19 epidemic prompted a partial or total shutdown, in which individuals were compelled to remain at house. The closing of public educational facilities necessitates web-based learning, which teaches program content. To combat the spreading of the pandemic, India, an Asian nation, has substituted online web-based learning systems. The administration has enforced a nationwide shutdown, resulting in the suspension of institutions and businesses. The majority of worldwide organizations utilize both sequential as well as intermittent internet instructional methodologies: sequential corresponds to faculty as well as trainees meeting at a pre-determined moment for engaging learning courses, whereas asynchronous relates to the academic staff trying to give the training without communication to this same learner. There isn't any contact between the professors as well as the pupils. Learners can obtain digital information anytime they choose with asynchronous types of digital training [14].

Teachers have an important part in creating studying fun, molding pupils' views as well as dispositions, including assisting them in passing. COVID-19 has changed the way of teaching as well as traditional learning methods by online-mode education. COVID-19 pushed a shift to electronic education, nevertheless many institutes throughout underdeveloped countries lacking the capabilities needed to properly instruct electronically. Furthermore, the education of professors differs internationally amongst higher-income, middle-income, and low-income nations. Some other significant stumbling block for disadvantaged pupils is access to the Web. It is indeed a recognition that facial expression teaching is much more effective than virtual learning, as well as the comprehensive change to online courses all through COVID-19 necessitates an investigation into professors as well as learner satisfaction with online teaching to recognize the benefits, drawbacks, as well as obstacles of digital training. Whereas the entire globe has already been in turmoil in recent years, this one has been particularly challenging for something like the globe, as well as the effects of internet

education on pupils and teaching personnel in especially have indeed been noticeable. Educating as well as studying available on the internet provides a lot of benefits, but it does have some drawbacks. Temporal and spatial freedom in going to lectures facilitates the studying experience for pupils. Digital training, on the other hand, serves as a hindrance to pupils' participation in real-world classroom events in a few minor and limited cases. Furthermore, pupils do not benefit from group education. Such problems even affect the attitudes of pupils, preventing individuals from completing shifts [15], [16].

The professor's duty also includes teaching, monitoring, including counseling pupils in both academically as well as personal aspects. COVID-19, the present emergency, emphasizes the importance of the Web as well as technologies throughout all aspects of society, especially schooling. This epidemic had demonstrated this same value of virtual learning in dealing with unexpected emergencies, so it's critical to evaluate faculty as well as customer attitudes about online programs. COVID-19 pandemic is indeed an emergent infection produced with the extreme reactive pulmonary sickness virus which can cause symptoms ranging from either the typical cold to much more chronic conditions, including influenza as well as gastrointestinal discomfort, as well as other functioning impairments. This was originally diagnosed throughout China as just unidentified influenza around the beginning of the year 2019.

Following that, this illness expanded globally, prompting the same World Health Organization (WHO) to declare it an epidemic. Notwithstanding enormous efforts to contain this illness, COVID19 reportedly affected 42.0 million individuals worldwide as well as destroyed over 1.5 million individuals as of this publication. COVID-19 has been spread rapidly as a result of societal mingling, although the study has shown how physical separation does have a substantial influence on inhibiting their transmission. As a consequence, many authorities have enforced COVID-19 exclusion zones and therefore are executing everything conceivable operations digitally, covering instructional procedures at universities, and business areas, as well as a variety of many other operations. The emergence of this novel coronavirus epidemic presented a much more significant threat to the worldwide educational sector inside the previous decade at the beginning of the year 2019. More than 1.60 billion individuals in the schooling sector including over 182 nations throughout all geographies have been affected by classroom closures, with the procedure expected to be completed by May 2020. Technologies have shown to be the most powerful towards protecting every one individual engaged in the educational process even while providing the potential of an alternate address. It must have been a response to certain broad but dominating governmental programs which desired to be robust as well as prepared to provide an option for facial expression education [17]–[19].

As little more than a result, the Web has become the primary instrument. Throughout the current COVID-19 entire epidemic, online learning has emerged considered a viable option for altering the conventional educational environment as a whole. Instructors, as well as learners, must have had to adapt overall habits, teaching as well as reading styles, evaluation methodologies, as well as other aspects of everyday lives. Such change has resulted in several improvements; however, it has also resulted in conflicts as well as disappointments amongst everyone the recipients of the instruction acts as well as academic players. Online -learning has demonstrated the need of modelling all participants' actions. Creative and imaginative solutions seem to be necessary to simplify the teaching procedure, particularly throughout the institutional setting.

They will address particular issues but instead help to ensure the long-term viability of learning. As families, pupils, institutions as well as school administration, including

provincial as well as national governments struggle to address the issue of rising schooling prices, virtual learning alternatives increasingly exploded. There are various benefits of giving classes digitally: Many people believe that offering certain programs electronically is a much more low-price option. This is not necessary for pupils as well as instructors to gather in some kind of a school. As a result, individuals in faraway locations could take programs that they must haven't been able to take previously. Learners may more conveniently accommodate personal studying sessions within their timetable with online programs. That provides additional freedom, especially for non-traditional learners who could have household or employment responsibilities that are not common among typical undergrads.Several pupils may absorb the curriculum at the same time without overcrowding this same session [20]–[22].

2. DISCUSSION

Education involves the practice of gaining novel information, abilities, or behaviors. Education begins from childhood as well as extends throughout an entire person's life. People's present behaviors alter as a result of education. Modern civilization is today trapped during a digital training vs. conventional education argument as a result of growing digitization throughout all areas. Several academics, educators, and even schooling enthusiasts from throughout the globe have weighed forth on the argument that supported either of such instructional methods over the other depending on their personal experiences including the supervision. You'll require a web-connected computer, windows pc, mobile phone, or iPad to engage in digital teaching and learning procedure, also recognized as e-learning. Individuals nowadays prefer digital learning to offline learning since this seems to be novel as well as affordable [23].

Because of the web's influence, an increasing number of students are opting to attend college classes electronically rather than in outdated facilities. Every of the internet, as well as conventional seminars, is tailored to a specific need. Every alternative would have its unique set of advantages. Nevertheless, the merits of digital education vs. traditional education are arguable, since each has its own set of advantages. Many people prefer real-time engagement, whereas many prefer the overall flexibility of digital–learning. We'll look at just how digital learning differs from conventional lecture instruction throughout this paper. Let's speak regarding the differences between e-learning and conventional education immediately. Facial expression communication between pupils, professors, including coworkers is an important part of instructional education. In some kind of a teaching setting, kids proactively engage by asking inquiries as well as receiving answers to specific concerns. This offers a unique teaching environment.

Individualized discussions flow as well as create opportunities for people to express unique perspectives. Regarding digital learning, on the contrary side, such type of engagement is indeed not feasible, although it may be achieved via emails, conversations, newsgroups, including seminars. Pupils studying in online-Learning are confined as well as must remain self-motivated. This participant teaches words, abbreviations, meanings, as well as the scientific aspect of various technologies through an interactive program. What's absent would be meaningful real-time evaluation as well as the practice of actual knowledge, including such exercises or drawings. Visitors would not be in a conversation setting if they take the programs over the web without accessibility. It is indeed possible because visitors won't engage with their classmates very much [24].

As a result, if anyone encounters a question, they would have to come back as well as locate the answer on alone own, or contact a teacher by phone or conversation. Many remember the times throughout schooling when pupils didn't want to wake up soon in the mornings and had

nothing option. Arriving prepared for a class but instead preparing for school takes a long period. As a result, the main distinction between digital Learning and conventional education is the availability of a real class in some kind of a conventional arrangement. You may sit in any room of the household as well as start/stop/replay the studying materials anytime anyone chooses to use digital learning. People saved a bunch of money with digital learning since they might not want to go somewhere and they don't need to have any journey expenditure. Pupils may use such opportunities to participate in those additional recreational pursuits, allowing individuals to keep a balance between educational as well as non-academic pursuits. Another distinction between digital learning and conventional education would be that digital learning allows learners from all over the world to participate. Furthermore, digital-learning looks to be arranged into greater as well as shorter portions, making it simpler to ingest as well as work on a tight timetable. Learners may prepare at their speed as well as take examinations when it is convenient for them. Pupils are not under any obligation to attend school.

Whenever a student using the e-learning media has experienced difficulties with a methodology or comprehending program content. Students may certainly read throughout the training materials or watch the webcast clip to get an answer to outstanding questions. Conventional schooling has set schedules because just one instructor oversees a small number of students. Some other significant difference between internet versus digital education is that in conventional education, instructors bring their unique instructional approach as well as information to convey. Regarding instructional conventional instruction, substance, as well as uniformity, might be a problem. When it comes to digital learning, the program concept, as well as execution, are always identical. Furthermore, the information distribution method is streamlined as well as constant, that might be challenging to do in a conventional training environment. However, instructional education may be made more enjoyable by designing collaborative exercises and tasks in which pupils collaborate. These activities allow students to participate proactively throughout the educational experience. Learners can share their thoughts as well as make the teaching experience extra engaging, which is not feasible inside a digital-learning environment. Among the most essential things regarding schooling seems to be the expense. Digital -learning seems to be greater cost-effective in comparison with the conventional methods of education when compared to conventional training. Is just a result of lower traveling expenses as well as logistical constraints?

Every moment the program is a means for teaching in conventional lecture; a professor is mandatory. Additionally, in official schooling, fees have been separated into many groups, namely enrolment, book expenditure, as well as miscellaneous charges. The argument over digital vs. conventional schooling may always be resolved. Although many individuals still favor conventional education methods, many choose the internet or the digital world because of its convenience as well as adaptability. Digital -learning is much more adaptable, reliable, as well as cost-effective than traditional education. Funds may attend workshop instruction for the hands-on technical experience if indeed the learner does have the opportunity. When a learner is short on schedule or money, they can employ the online setting.

Conventional education offers several advantages, such as instructor-pupil contact, that is critical to the education procedure. The manner of teaching has shifted from instructor-centered to pupil-centered learning, which seems to be a significant advance in the learning sector. Teachers are the main resource of training in the trainer-centered educational system, as well as pupils are the beneficiaries of her experience. Pupil-centered learning, on the other hand, stresses the involvement of pupils in information creation in the classroom. Instructors take on the position of "assistant to pupils who set and implement school respective norms" inside a pupil-centered method. Instructors reply to pupil projects as well as urge students to

submit extra or alternate solutions. By employing the web as well as other sophisticated technical instruments to communicate, transmit, and promote spread information, pupil-focused education has profited from numerous new technologies." Because it takes advantage of internet networks, digital training seems to have become a component of the twenty-first millennium. This use of digital platforms technology including the Web to improve education as well as give individuals greater access to digital resources as well as products are referred to as digital learning. Both Webs, as well as schooling, have merged to give people all the abilities they will need throughout the long term.

According to existing research done in this domain, there are 3 major techniques for internet education: improved, integrated education, as well as online methods. To guarantee new as well as dynamic training, improved education makes extensive use of technologies. Programs combine classroom and internet training. The digital method denotes how the coursework is supplied over the internet. Learners benefit from digital learning because individuals may download relevant data 24 hours a day, seven days a week. Digital learning transforms schooling into a pupil-centered experience in which pupils participate in the teaching procedure while professors serve as directors as well as mentors. Numerous technologies are available on internet channels to assist in running virtual engaging lessons and reducing pupil dropout. Virtual learning systems are envisioned for facilitating the information exchange as well as entire coordination of classroom events. DingTalk (Alibaba Company's engaging digital console), Google Meet (for instance, video calling apps), Skype (for instance, is globally utilized for video callings as well as audio conferences), WeChat Works (for instance, videos exchanging as well as calling developed within China), as well as the WhatsApp (for instance, video callings as well as audio calling, chatting purpose, as well as a content exchange), along with the Zoom app (for instance used for video calls as well as audio calls, conversation, and information expressing) are very well notable engaging web instruments.

Teacher self-selection, like pupil consciousness, is indeed a challenge. When offered the option, teachers draw around their respective abilities much the same way that pupils go towards the class location where students anticipate achieving the greatest. Whenever one could not account for teacher influence, it's impossible to evaluate pupil results. This same fact because both portions of the program are taught by identical instructors addresses one aspect of the issue. Researchers don't solve the issue, though, since, with just one teacher, researchers can't say how the percent of the reported impacts of different distribution modalities are attributable to his particular traits. As a result, researchers aim to inspire others to do research similar to us as well, whereby the identical instructor teaches in both locations.

Throughout the aggregation of several reconstructions of the experiment, personal teacher traits would be becoming cheaper of a confusing issue. People live within an information technological era, therefore numerous individuals, particularly pupils in further learning, rely on computers to complete their tasks. Many further schooling organizations were conscious that networking technologies may be used to develop, promote, distribute, as well as assist in education, as well as improve pupils' experiences and overall understanding. As a result, the fast advancement and expansion of computer as well as telecommunication technologies have had a significant impact on academic learning. This is known as digital learning, which that signifies both lecturers and pupils collaborate on school tasks over the web, rather than in a typical lecture setting. Throughout the previous 15 years, advocates of computer-assisted education have questioned the notion that conventional lectures are always the best way to facilitate knowledge in some kind of a college setting. During comparative studies on the distinctions between digital learning as well as traditional education, individuals discovered how digital learning has its unique benefits on pupil education results. Learners' results of

classroom-rooted versus internet-rooted construction security courses were compared in some kind of a study. Pupils on a web-rooted program performed much better than pupils on a classroom-based program throughout five assessments, with particular attention to application-kind assessment topics.

Digital training allows both the instructor as well as an individual pupil to establish his knowledge speediness, along with the supplementary advantages of being ready for creating a plan which works for everybody. As just a significance, employing a virtual learning system provides for a greater job combination, thus there's no necessity to sacrifice everything. Digital training gives students important personal managing abilities, makes this quite easier for striking a perfect work-studies combination. This communal goal in between all learners as well as the instructor can however encourage all sides to take on additional tasks as well as exercise greater independence. Within an ecosystem equally vast as well as varied as the internet, there are unlimited abilities but also subjects to teach and explore. A growing number of schools as well as universities are offering electronic versions of existing programmes for various majors including disciplines. There are several options for every type of student, ranging from concert music to particle physics. Studying for any programme online is an excellent option to obtain a genuine diploma, graduation, or certificate while needing to commute to a university. Using web - based learning, anyone can teach or train virtually anywhere on this same planet. This is no longer necessary to move between one area to another or to stick to something like a rigid schedule.

Furthermore, individuals not only save time, however participants also save money, which can be put against important activities. Because such digital training is available from just about any location having internet connection, travelling seems to be a terrific opportunity to take advantage of that too. Whether you're studying abroad and want to obtain a job, for example, digital training seems to be a fantastic choice. There was no necessity to stop functioning or studying in moving to new and exciting places. Virtual classrooms are typically shorter than traditional classrooms. Most web education systems typically permit a single learner at a moment, which provides for greater contact as well as discussion among yourself as well as one's teacher throughout virtually every circumstance. Instructors may typically acquire a wide range of resources internet, including films, photographs, including eBooks, although they could also utilize multifarious forms, namely the various blogs as well as talks, just for enriching the complete teaching process. As a result, such supplementary material is available at any moment and from any place, allowing students to receive genuinely flexible and personalised instruction. Throughout most cases, e-learning becomes less inexpensive then conventional lecture training. Various finance options, such as purchasing monthly instalments or per appointment, are usually offered. This allows for more efficient spending. Almost majority of pupils may be qualified for discounts or subsidies, thus the expense is rarely exorbitant. Pupils can also save money by availing use of free transportation as well as instructional materials.

3. CONCLUSION

This examination looked into how teachers, as well as pupils, felt regarding the digital education. As per study consequence, conventional learning is inefficient in numerous places while making a comparison along with the online mode of the education. Owing to this inherent threat in adapting to online programs as well as the absence of connection amongst pupils as well as their teachers, conventional education students confront several obstacles. Online educational platforms as well as accessible systems inspire pupils-centered education nowadays globally as well as are easy to acquire in appearance of hardship, namely COVID-19. Furthermore, the education ministry may counsel telecom providers on how to improve

overall pupil facilities at a very cheap and affordable prices. It's essential noticing that pupils with special necessities must be in synchronized courses, with special requirements professionals helping them. Our survey focuses on college pupils' opinions of digital training, which revealed that it was a versatile as well as valuable training resource throughout the recession but also had certain drawbacks. Digital training, as per pupils, is a relaxing as well as an effective resource of information. Almost the majority of respondents believed that digital education allows pupils to have delayed accessibility to educational resources at any moment of overall daytime.

REFERENCES

[1] J. Yu-Fong Chang, L. H. Wang, T. C. Lin, F. C. Cheng, and C. P. Chiang, "Comparison of learning effectiveness between physical classroom and online learning for dental education during the COVID-19 pandemic," *J. Dent. Sci.*, 2021, doi: 10.1016/j.jds.2021.07.016.

[2] Hadiyanto, S. Wulandari, L. S. Wilyanti, Supian, R. Afria, and Nazarudin, "The Effective Use of Full Online Learning to Replace Classroom Learning During the Covid-19 Pandemic," *Int. J. Curr. Res. Rev.*, 2021, doi: 10.31782/ijcrr.2021.sp205.

[3] Q. Qian, Y. Yan, F. Xue, J. Lin, F. Zhang, and J. Zhao, "Coronavirus disease 2019 (Covid-19) learning online: A flipped classroom based on micro-learning combined with case-based learning in undergraduate medical students," *Adv. Med. Educ. Pract.*, 2021, doi: 10.2147/AMEP.S294980.

[4] S. Sutrisno, "INCREASED LEARNING ACTIVITIES AND OUTCOMES THROUGH ONLINE LEARNING WITH GOOGLE CLASSROOM IN THE COVID-19 PANDEMIC PERIOD," *Ideguru J. Karya Ilm. Guru*, 2020, doi: 10.51169/ideguru.v5i1.151.

[5] C. Müller and T. Mildenberger, "Facilitating flexible learning by replacing classroom time with an online learning environment: A systematic review of blended learning in higher education," *Educational Research Review*. 2021. doi: 10.1016/j.edurev.2021.100394.

[6] B. F. Darkwa and S. Antwi, "From Classroom to Online: Comparing the Effectiveness and Student Academic Performance of Classroom Learning and Online Learning," *OALib*, 2021, doi: 10.4236/oalib.1107597.

[7] C. S. Maitimu, J. Tomasouw, and ..., "The Effectiveness of The Online Learning Medium Google Classroom on The Learning Outcome," *J-EDu J.* ..., 2021.

[8] C. Sojayapan and J. Khlaisang, "The effect of a flipped classroom with online group investigation on students' team learning ability," *Kasetsart J. Soc. Sci.*, 2020, doi: 10.1016/j.kjss.2018.02.003.

[9] M. Manegre and K. A. Sabiri, "Online language learning using virtual classrooms: an analysis of teacher perceptions," *Comput. Assist. Lang. Learn.*, 2020, doi: 10.1080/09588221.2020.1770290.

[10] T. Walters, N. J. Simkiss, R. J. Snowden, and N. S. Gray, "Secondary school students' perception of the online teaching experience during COVID-19: The impact on mental wellbeing and specific learning difficulties," *Br. J. Educ. Psychol.*, 2021, doi: 10.1111/bjep.12475.

[11] A. Elzainy, A. El Sadik, and W. Al Abdulmonem, "Experience of e-learning and online assessment during the COVID-19 pandemic at the College of Medicine, Qassim University," *J. Taibah Univ. Med. Sci.*, 2020, doi: 10.1016/j.jtumed.2020.09.005.

[12] O. O. Noah and K. O. Gbemisola, "Impact of Google Classroom as an Online Learning Delivery during COVID-19 Pandemic: The Case of a Secondary School in Nigeria," *J. Educ. Soc. Behav. Sci.*, 2020, doi: 10.9734/jesbs/2020/v33i930259.

[13] K. Beaumont, "Google Classroom: An online learning environment to support blended learning," *Compass J. Learn. Teach.*, 2018, doi: 10.21100/compass.v11i2.837.

[14] Istijanto, "The effects of perceived quality differences between the traditional classroom and online distance learning on student satisfaction: evidence from COVID-19 pandemic in Indonesia," *Qual. Assur. Educ.*, 2021, doi: 10.1108/QAE-08-2020-0098.

[15] B. L. Moorhouse, Y. Li, and S. Walsh, "E-Classroom Interactional Competencies: Mediating and Assisting Language Learning During Synchronous Online Lessons," *RELC J.*, 2021, doi: 10.1177/0033688220985274.

[16] C. K. Lo and K. F. Hew, "A comparison of flipped learning with gamification, traditional learning, and online independent study: the effects on students' mathematics achievement and cognitive engagement," *Interact. Learn. Environ.*, 2020, doi: 10.1080/10494820.2018.1541910.

[17] L. Dooley and N. Makasis, "Understanding student behavior in a flipped classroom: Interpreting learning analytics

data in the veterinary pre-clinical sciences," *Educ. Sci.*, 2020, doi: 10.3390/educsci10100260.

[18] C. J. Tanis, "The seven principles of online learning: Feedback from faculty and alumni on its importance for teaching and learning," *Res. Learn. Technol.*, 2020, doi: 10.25304/rlt.v28.2319.

[19] I. N. Asniza, M. O. S. Zuraidah, A. R. M. Baharuddin, Z. M. Zuhair, and Y. Nooraıda, "Online Game-Based Learning Using Kahoot! to Enhance Pre-University Students' Active Learning: A Students' Perception in Biology Classroom," *J. Turkish Sci. Educ.*, 2021, doi: 10.36681/tused.2021.57.

[20] L. Efriana, "Problems of Online Learning during Covid-19 Pandemic in EFL Classroom and the Solution," *JELITA J. English Lang. Teach. Lit.*, 2021.

[21] M. Kurniawati, H. Santanapurba, and E. Kusumawati, "PENERAPAN BLENDED LEARNING MENGGUNAKAN MODEL FLIPPED CLASSROOM BERBANTUAN GOOGLE CLASSROOM DALAM PEMBELAJARAN MATEMATIKA SMP," *EDU-MAT J. Pendidik. Mat.*, 2019, doi: 10.20527/edumat.v7i1.6827.

[22] Y. H. Liu and F. Y. Yu, "Supporting active learning and formative evaluation via teaching-by-questioning in classrooms: design, development, and preliminary evaluation of an online learning system," *Interact. Learn. Environ.*, 2019, doi: 10.1080/10494820.2018.1489858.

[23] P. Babhale, H. Gaglani, S. Khare, K. Singh, and A. Joshi, "Online learning during lockdown period of COVID-19 pandemic: A student perspective," *J. Med. Pharm. Allied Sci.*, 2021, doi: 10.22270/jmpas.V10I3.1142.

[24] N. Van Thien, "Effectiveness of Online Learning When Implementing Collaborative Online Learning In Flipped Classroom," *Tech. Soc. Sci. J.*, 2021.

CHAPTER 10
AN OVERVIEW ON MAJOR SIGNIFICANCE AND IMPACT OF SMART CLASS IN EDUCATION

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ABSTRACT: ***In the previous decade, there has been a noteworthy rise in academic norms, development, including creativity throughout the academic field. Using interacting digital displays, monitors, as well as digital pads, universities, as well as other higher academic organizations, have started to adapt current instructional techniques. Nevertheless, we can't dispute those technological advancements have made learning increasingly engaging and accessible. Pupils like to exchange as well as transmit studying information via iPad, smartphones, as well as other gadgets since it reduces their money as well as hassle. Educators, on the contrary side, may use such intelligent technologies to convert a dull lesson into an entertaining lesson. It isn't just concerning exchanging data; it's about improving digital presentations by eliminating the necessity for physical writing. This article presents the major significance and impacts of the smart class in the education sector. Data may be displayed utilizing images, diagrams, statistics, flow diagrams, and even animation films utilizing intelligent classroom technologies including digital smartboards. It makes learning more appealing, fascinating, and simple to grasp. It promotes pupils' capacity to study as well as recall material for just an extended length of duration. This remains a fundamental reality that whenever people understand via pictures instead of merely gazing at the chalkboard and hearing, students grasp the information more quickly.***

KEYWORDS: ***Education, Teacher, Technology, Smart Class, Student.***

1. INTRODUCTION

Several individuals may believe that education is a time-consuming procedure, or at certainly it has been till recently. Intelligent courses have been developed mainly as a result of the incorporation of technologies within the educational institution, introducing fundamental improvements to the teaching method. Intelligent classrooms use sophisticated visualizers, monitors, loudspeakers, interactive whiteboards, as well as other technologies to build a dynamic classroom environment. Learners are offered this same ability to dive further within academic areas as well as grasp perhaps the biggest complicated issues via easy visuals as well as movies when technologies are combined using intelligent education practices. Instructors can readily analyze young pupils' educational achievement owing to the inventive technological instruments. According to internet data, the global e-learning market has been predicted to hit over 242 billion US (United States) dollars this year [1], [2].

This intelligent classroom environment shall expand dramatically with the advent of AI (Artificial Intelligence) as well as Virtual Realities. Intelligent classrooms use cutting-edge technologies to improve the teaching process. Pupils, as well as instructors, may both benefit from exploring a great digital library. Learners may utilize these to find beneficial studying tools, while instructors may utilize these to find photographs, movies, as well as a plethora of additional web tools to aid throughout the instructional methods. Instructors can potentially innovate using their instructional methods by using intelligent educational devices. Rather than studying long lines of writing, teachers could use movies or flow diagrams to convey a variety of subjects. This one would make the teaching experience more engaging for kids because they would be capable to remember the material for extended durations of time [3]–[5].

Intelligent education enables pupils as well as instructors to engage further. All participants obtain an opportunity to bond more as individuals engage jointly in novel educational endeavors. Such participatory classrooms not only make studying easier but also allow instructors to understand more about individual pupils' intellectual abilities. However, unlike instruments utilized throughout conventional classrooms, modern technological instruments utilized in intelligent courses endure lengthier as well as are easier to operate. To maintain a seamless functioning, they could need certain regular upgrades. Instructors may employ intelligent technologies, such as interactive whiteboards, to artistically design instructional material, as well as images, effectively break down potentially this same most difficult topic into a more intelligible manner [6].

Such a strategy is very beneficial for educating elementary pupils because it is a good way to get their focus. Instructors may also employ voice-overs to make overall instructional sessions more enjoyable. Intelligent courses' stunning images, graphs, including videos are essential aspects in cultivating pupils' innovative abilities. Pupils' imaginations are boosted when they are exposed to pictures as well as graphics rather than simply textual. Pupils in the previous educational institution were pushed to make copious records in the classroom. It could be a time-consuming task that might divert pupils' attention away from their studies. Instructors may simply exchange digital remarks alongside intelligent classrooms, enabling pupils to focus entirely on the current lesson. Furthermore, the intelligent capabilities aid instructors with marking faster procedures, assignment allocation that is simpler, and much more. Intelligent courses have the potential to make the instruction as well as studying processes more engaging. Instructors may also incorporate clever quizzes as well as riddles throughout school lessons to encourage pupils' inventiveness. Even though previously indicated, such novel studying, as well as instruction methods, would have a significant positive impact on the academic field [7]–[9]. Figure 1 illustrates the significant major features of smart glasses in the education sector.

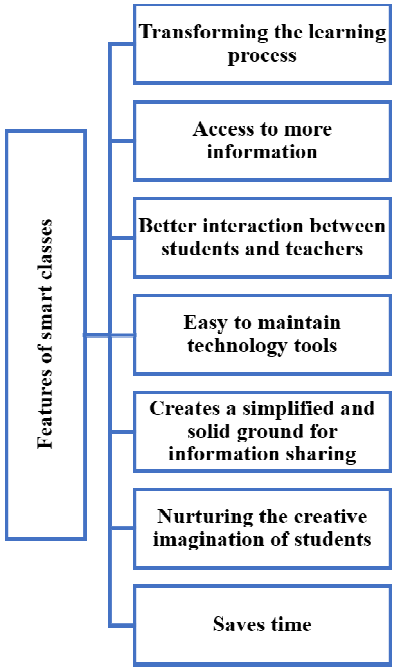

Figure 1: Illustrates the significant major features of the smart classes in the education sector [Source: Google].

Knowledge may be displayed on intelligent platforms utilizing images, logos, tables, and control charts, as well as animation films utilizing virtual class technologies. Technology helps to study more enjoyable as well as understandable. This same usage of intelligent displays helps the instructor to conduct lessons very effectively while including numerous presentations for visual aids. Teachers may quickly convey the most important aspects of each class through PowerPoint displays. This facilitates a brief Q&A discussion amongst instructors as well as learners, promoting a positive educational environment within the classroom. For something like an intelligent classroom, there are linked touchscreen panels as well as projections. From the provided materials, one instructor may readily demonstrate many actual techniques. Pupils' comprehension improves as a result of such an improved teaching strategy [10], [11]. This intelligent classroom is indeed a good approach to promoting environmentalism because it eliminates a lot of paper, allowing for healthier schooling. Intelligent classroom technologies allow pupils to create web demonstrations as well as obtain feedback from college instructors in some kind of a fraction of the period usually taken in the conventional education procedure. Instructors do not need to instruct pupils to take informal remarks because it is simple to transmit the lecture immediately. The above reduces the effort for both instructors as well as pupils, which may be spent on more interesting tasks. This graphical approach seems greater probable to engage kids than the previous version. Intelligent workshops also assist pupils as well as instructors in achieving high-quality outcomes, which leads to greater performance [12], [13]. Figure 2 illustrates the major advantages of the adaption of smart classes in the education sector.

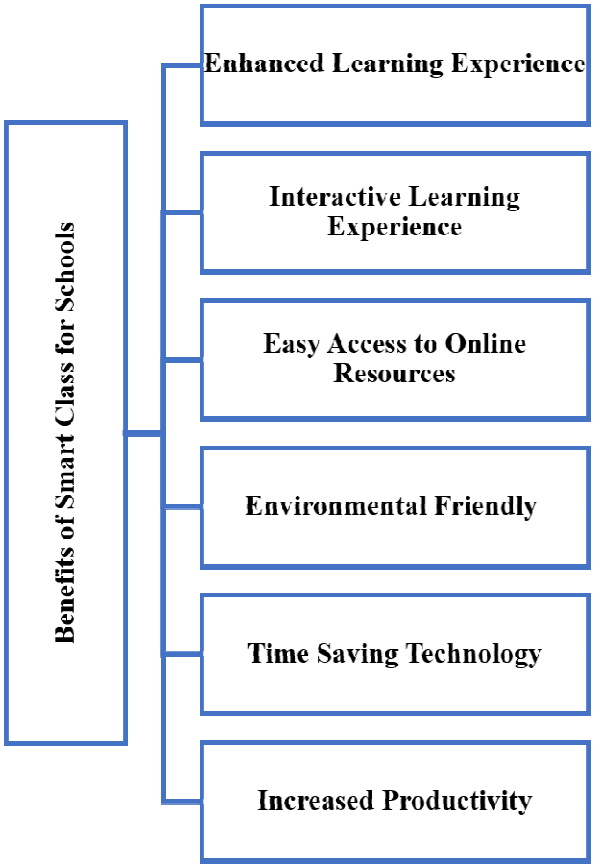

Figure 2: Illustrates the major advantages of adaption of the smart classes in the education sector [Source: Google].

Technology-enabled learning increasingly infiltrating classes as well as creating the road for intelligent learning. Intelligent classes have risen to prominence as a result of the combination of modern equipment as well as cutting-edge software technologies to improve education as well as maintain track of pupils' progress. Furthermore, intelligent or virtual workshops stimulate innovation, as well as an engaging atmosphere, which will aid in the generation of more inventive concepts, questions, and answers. As a result of such an adaptable VC approach, a user's scope of understanding becomes broadened, while informal education gets encouraged. Do not however miss Teleconferencing Options: The Comprehensive Overview if guys wish to learn everything regarding alternative VC alternatives. Several VC resolution elements can be found within. Likewise, let's consider the benefits of technology-enhanced options for the next generations [14], [15].

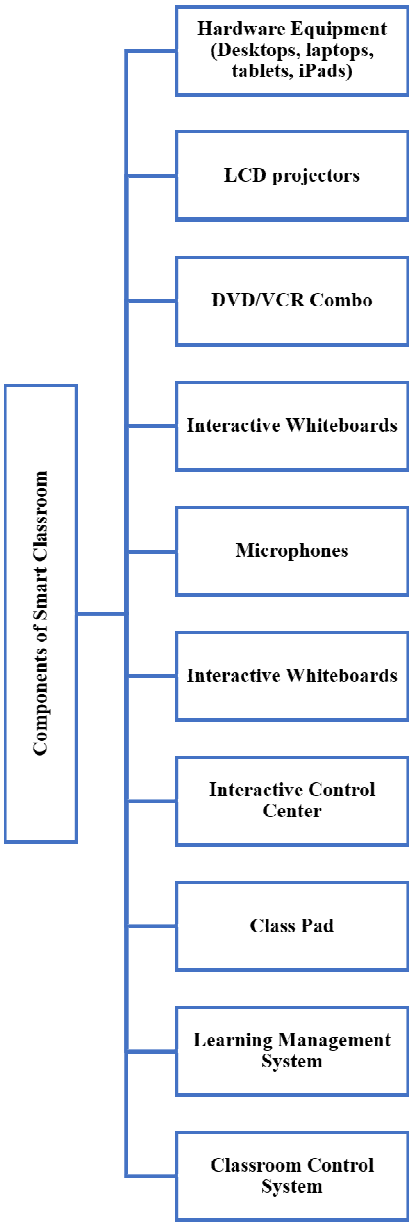

Figure 3: Illustrates the major elements of the smart classes in the education field [Source: Google].

Almost everyone understands how conventional courses use a chalkboard, workbooks, chalked, as well as dusting to deliver instruction, but also that instructors must plan lectures ahead of time to educate. Pupils, on the contrary side, pay attention to the presentations as well as make papers. Instructors are occasionally required to bring pupils outdoors of the classrooms to illustrate a concept. Pupils must wait till the following daytime if they have any more questions about their course. Learners may be required to collect examination preparations by consulting literature while accessing institutions. Throughout the curriculum, the pupils, as well as instructors, have set schedules. Automated examination, as well as analysis, are carried out. Intelligent classrooms, on the other hand, have identical goals to traditional classrooms, namely to provide higher-quality education using a variety of modalities. Intelligent classrooms make utilization of some technical instruments, including internet-connected PCs or notebooks, electronic textbooks, presentations, and so on. Learners are more involved with audio as well as audio-visual technologies as a result of this. Instructors have fast accessibility to material and therefore may convey it to pupils. Learners also receive online lessons from specialists all across the globe. Instructors, as well as pupils, may use technologies to communicate with one another beyond schools for more efficient education. Let's talk about the intelligent classroom and also its role within schooling [16]–[18].Figure 3 illustrates the major elements of the smart classes in the education field.

Intelligent classrooms are cutting-edge teaching approaches that use technologies to give learners high instruction and improved study results. As all universities adopt intelligent classes within their academic organizations, conventional classes increasingly diminishing potential usefulness. Vector graphics, smartboards, ultrabooks, broadband access, projections, loudspeakers, headphones, podiums, cameras, as well as other advanced technologies are all available in intelligent classrooms. While you may be aware, today's pupils are drawn to tools including technologies such as cellphones, iPods, laptops, and other similar devices. People like to educate by exchanging as well as exchanging studying information utilizing technology means. Education becomes increasingly entertaining as well as fascinating for pupils as just a result of this, as well as total concentration throughout the course [19].

With new technologies, intelligent courses are fast transforming the manner instructors, as well as learners, experience educational experiences. Computing is extremely vital in today's environment because kids have such a plethora of resources at their disposal. As per Indian Educational Sector Forecast, there is a large number of institutions across various Indian states, with barely 10.00% of the private educational institutions using audio-visual classroom instruction. Intelligent classrooms provide learners with additional opportunities to be engaged. Through viewing documentaries as well as cartoons, students may understand challenging ideas. Studying will become a pleasurable as well as an engaging activity for pupils as just a result of such, but overall intellectual achievement increases. Instructors can also use novel technology solutions to instantly analyze as well as appraise pupils depending on overall achievement within intelligent classrooms [20].

It gives pupils accessibility to an internet reference library. This library may also be used by instructors to find internet studying resources, movies, photos, and lectures, among other things. All of them have accessibility to resources that will help professionals study as well as educate more effectively. Pupils, as well as instructors, benefit from intelligent campuses because they can study as well as instruct more effectively. Children can study in some kind of a variety of ways owing to technology technologies. Instructors may use technologies to turn large sentences or words into visuals, infographics, and visualizations, including interactive movies to assist students to comprehend the subject faster. This aids kids in remembering material for something like a longer duration. This is indeed a proven truth that images help us remember knowledge faster in comparison to text [21].

Such kind of web-linked technologies within intelligent classrooms retain a wealth of data. It is available at all times throughout both instructional as well as training activities. Educators could utilize material from such a variety of academic resources to help them educate. Learners will have access to data as a result of this. Utilizing projections, slideshows, movies, as well as graphics, instructors may give lessons extremely efficiently. This will facilitate collaborative discussions amongst pupils as well as professors throughout the curriculum. Students would be far increasingly interested in learning as well as asking inquiries about various subjects. Pupils, as well as instructors, would form deep bonds as a result of this. You're probably aware of how intelligent classrooms are linked to technology as well as this same web [22].

Whenever instructors want to demonstrate ways to convey a subject together in a realistic manner, they can use technology resources on laptops. Students may educate by downloading as well as extracting studying information from the internet. Applications, portals, e-textbooks, as well as a plethora of other resources, seem to be accessible. This would make it easier for learners as well as instructors to communicate as well as exchange knowledge, resulting in greater educational results. Eco-friendly technical instruments are used in intelligent classrooms. These professors would conduct lessons as well as convey material in just such a manner so nothing material would require to be written down or printed because anything would be accessible electronically. The above reduces the number of sheets, pens, colors, as well as pencils used. Pupils spend the majority of their period in the classroom making documents rather than studying. Tomorrow, however, information would be delivered via a demonstration first from professors using intelligent classrooms. As a result, effort spent making papers, as well as similar useful tasks, would be reduced. Some few technologies could however assist instructors in providing evaluations as well as ratings to pupils depending on actual behavior. Assisting students with projects, and discussions, including involvement, among other things. Intelligent classrooms have accessibility to information, which allows them to devote more attention to more useful tasks [23]. Figure 4 illustrates the variety of the smart classes.

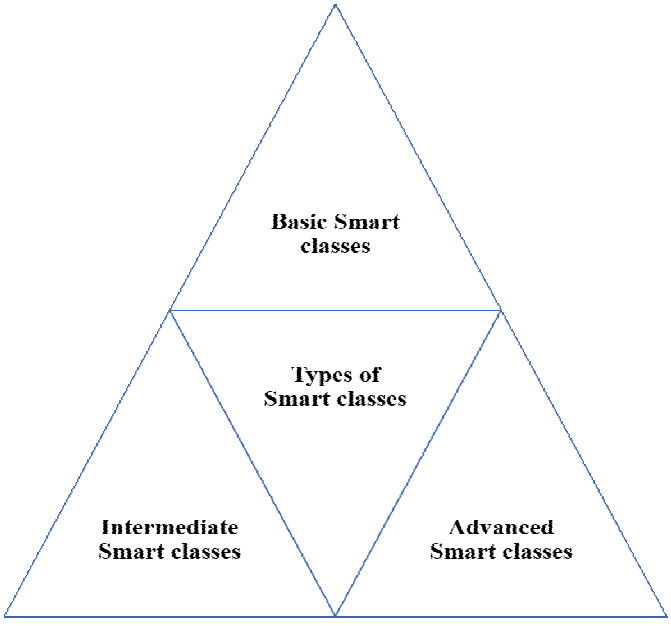

Figure 4: Illustrates the variety of the smart classes [Source: Google].

Intelligent workshops aid in the development of pupil participation as well as enthusiasm. Students have access to tools enabling higher educational achievements, and also the

opportunity to study as well as practice for academia. This allows for greater opportunity for contact between students and teachers. This one would assist pupils as well as instructors in achieving high educational results. This is frequently used for genealogy or cooperation for remote education throughout all locations. Learners, as well as instructors, may cooperate to boost general engagement throughout the educational processes using such technology resources. This fully furnished as well as physically beautiful classroom encourages pupils to analyze as well as behave rationally. This aids with the development of talents within the chosen sector. Pupils become introduced to analytical reasoning as well as problem-resolving abilities owing to the web [24].

Individuals can examine their surroundings as well as adjust the things that aren't working. Education gets simple when such tools are becoming more inexpensive and more available. Increasing employment of electronic devices within the classrooms is altering the manner people learn. Educators pass on their expertise to pupils even while simplifying this instructional procedure. Through the support of intelligent classroom technologies, pupils would be more interested in their academics. Intelligent courses include digitally upgraded, where content may be visualized using graphics, infographics, visualizations, movies, as well as other visual aids. Researchers understand how engaging learning topics using technologies would be for every learner. Intelligent classrooms assist professors in delivering lessons greater efficiently, resulting in a superior educational environment for students.It features a smart whiteboard, lasers, workstations, LED (Light Emitting Diode) lights, and a web connection, among other things, to provide superior instruction. Utilizing a variety of educational web pages as well as applications, instructors may demonstrate pupils' actual realistic alternatives.

2. DISCUSSION

People may be aware of the value of intelligent classrooms throughout the educational structure. Intelligent classrooms are indeed a boon to learners in the twenty-first era. Do users recall whenever our instructors utilized to display animation pictures as well as documentaries to illustrate every subject so we were able to follow along quickly? As a result, such type of graphical aid may assist pupils in gaining a deeper comprehension of the material. Whenever it refers to outdoor excursions, intelligent displays may be quite useful. Let's take a look at how intelligent courses affect pupils as well as professors. Whenever the contents were intriguing, studying becomes enjoyable. Intelligent seminars achieve that similar approach by combining information with something like a sense of enjoyment. Researchers search for pupils that have received good schooling. Today's economy is quite aggressive; therefore, it seems necessary always stay on top of things. This should not eliminate that notion of conventional schooling, but rather instead expands upon it. Intelligent schools give possibilities for pupils to receive high-quality instruction while also assisting pupils in properly comprehending ideas including improving overall literacy as well as composition abilities to attain scholastic achievement.

These had aided pupils in the fields of accountability, personal administration, communications, engagement, cooperation, memory, obtaining internet tools, acquiring newer technical methods, and achieving high scholastic achievements, among others. As students may be aware, as technological advances, educational techniques constantly shifting as well as improvements for the benefit. Intelligent classrooms are indeed the greatest alternative for professionals in this scenario. Educators have had an influence on the intelligent class settings for something like a variety of justifications, including engaging meetings, thorough synchronization, easy upkeep, engaging learning surroundings, asset affordability, decent instructional methodologies, self-belief, and timekeeping, as well as

providing individual guidance for classmates. As per the Gallup poll, pupils' involvement has increased by around 55.00 percent since intelligent technologies were introduced throughout schools and institutions. Interactive whiteboards enable professors to conduct more successful demonstrations because allowing them to use various projects throughout their presentations to convey given material. With certain unique features including graphical displays, instructors may simply clarify everything as well as any component of their course. This facilitates a speedy question-and-answer discussion amongst instructors as well as pupils, which results in a superb teaching atmosphere inside the classrooms. The intelligent classroom features synchronized electronic screen panels including projections. Every instructor may quickly demonstrate several actual alternatives found via the internet. Learners may access a variety of digital tools over the web.

For something like the previous four as well as a half-decade, smartboards, as well as dynamic notepads, have been adopted at even a frequency approaching 70.00% inside the educational industry, both public as well as commercial. This seems to be clear evidence of how academic institutions increasingly adopting new technologies. Intelligent teaching technologies use a dynamic data exchange strategy, eliminating this requirement of material, notepad, pen, or photocopies, allowing for the implementation of an effective "Go Greens Idea." One may claim that keeping the environment pure as well as beautiful is among the key advantages of intelligent teaching technologies. Unlike this old teaching approach, which required pupils to take extensive handwritten records. Pupils may create demonstrations digitally as well as receive comments from their professors within a much shorter period owing to intelligent classroom technologies. Instructors do not require to ask pupils to take poor notes because the lecture may be presented to everybody immediately. The above spares instructors as well as pupils a bunch of energy that could be spent on other engaging activities. Information being displayed in some kind of a graphical style with the aid of smart classroom equipment, which would be more inclined to interest pupils. So are pupils better engaged, yet students also grasp concepts relatively quickly. This encourages pupils as well as instructors to achieve high outcomes, resulting in increased production. Interactive whiteboard technologies allow pupils to have a greater enjoyable educational environment. Technology can transform a dull presentation into an engaging as well as a participatory experience.

Virtual panels captivate their audience through showcasing multiple contents in diverse forms of textual, images, as well as previews, rather than simply talking about it. In this similar instance, pupils are more inclined to participate, resulting in a productive meeting. Virtual models are also used by several institutions throughout technological areas such as automobiles and aviation. Learners may mimic creative representations of different automobile systems using machine learning, enabling learners to try out engine elements without needing to construct anything. Engineers may proceed to develop a model that once the model satisfies testing. The above spare individual’s money as well as financial assets, resulting in a much more effective training experience.

3. CONCLUSION

Although the epidemic has resulted in just a slight fraction of prospective schooling being adopted, each area has so much greater promise. As per official estimates, the overall global e-learning industry is expected to exceed 242.0 billion dollars by 2024. Researchers have looked at the prospect of intelligent classes as soon as 24 months from now, owing to developing technology like machine learning as well as digital actuality. The intelligent classrooms seem to be a technologically enabled class that offers a wide range of training as well as studying approaches. This might be as easy as adding sound as well as graphical

elements into a lecture, that is anything that numerous classes are adopting nowadays.These intelligent classrooms also aid the instructor by the use of technologies. There seem to be tools that can help teachers with course preparation or possibly store an electronically delivered lecture for subsequent referencing. In this article, the authors discussed the major significance and impact of smart classes in the education sector. Building computerized classrooms have both advantages as well as disadvantages. The largest benefit is distance training, which is a huge request in today's environment. With the internet programs that are now available, people seem to be on the verge of intelligent learning. We have seen several usages before COVID, including pre-recording lessons enabling learners with conflicting schedules or participatory education.Intelligent classroom technologies, as previously said, are indeed a boon to the educational sector. It enhances pupils' self-confidence as well as pushes pupils to explore outside the box.

REFERENCES

[1] A. Alelaiwi, A. Alghamdi, M. Shorfuzzaman, M. Rawashdeh, M. S. Hossain, and G. Muhammad, "Enhanced engineering education using smart class environment," *Comput. Human Behav.*, 2015, doi: 10.1016/j.chb.2014.11.061.

[2] A. Tasnim and M. Masud, "A System Framework for Smart Class System to Boost Education and Management," *Int. J. Adv. Comput. Sci. Appl.*, 2016, doi: 10.14569/ijacsa.2016.071013.

[3] M. Korkmaz, "Smart Class Applications for Education," in *UBMK 2019 - Proceedings, 4th International Conference on Computer Science and Engineering*, 2019. doi: 10.1109/UBMK.2019.8907108.

[4] Q. Lin *et al.*, "The smart class teaching module for rehabilitation medicine English education in China," *Med. Sci. Monit.*, 2021, doi: 10.12659/MSM.929834.

[5] Z. T. Zhu, M. H. Yu, and P. Riezebos, "A research framework of smart education," *Smart Learn. Environ.*, 2016, doi: 10.1186/s40561-016-0026-2.

[6] R. Scholar and A. Professor, "Techno Pedagogical Skills For Teaching-Learning Process In Smart Class," *Talent Dev. Excell.*, 2020.

[7] Y. Huda and D. Faiza, "DESAIN SISTEM PEMBELAJARAN JARAK JAUH BERBASIS SMART CLASSROOM MENGGUNAKAN LAYANAN LIVE VIDEO WEBCASTING," *J. Teknol. Inf. dan Pendidik.*, 2019, doi: 10.24036/tip.v12i1.173.

[8] R. Winkler, M. Söllner, and J. M. Leimeister, "Enhancing problem-solving skills with smart personal assistant technology," *Comput. Educ.*, 2021, doi: 10.1016/j.compedu.2021.104148.

[9] Q. Meng, J. Jia, and Z. Zhang, "A framework of smart pedagogy based on the facilitating of high order thinking skills," *Interact. Technol. Smart Educ.*, 2020, doi: 10.1108/ITSE-11-2019-0076.

[10] X. Zhang and L. Chen, "College English Smart Classroom Teaching Model Based on Artificial Intelligence Technology in Mobile Information Systems," *Mob. Inf. Syst.*, 2021, doi: 10.1155/2021/5644604.

[11] M. Z. Asghar, S. Arif, E. Barbera, P. Seitamaa-Hakkarainen, and E. Kocayoruk, "Support through social media and online class participation to enhance psychological resilience," *Int. J. Environ. Res. Public Health*, 2021, doi: 10.3390/ijerph182211962.

[12] R. Chanchal and M. Sunita, "A review on applications of multimedia and e," *Int. J. Home Sci.*, 2017.

[13] Q. D. Pham, N. N. Dao, T. Nguyen-Thanh, S. Cho, and H. C. Pham, "Detachable Web-Based Learning Framework to Overcome Immature ICT Infrastructure Toward Smart Education," *IEEE Access*, 2021, doi: 10.1109/ACCESS.2021.3062371.

[14] M. Gerami and M. H. Kazemi Rad, "Evaluating of Internet of things' effect on Smart Classes and Educational System," *J. Res. Sci. Eng. Technol.*, 2020, doi: 10.24200/jrset.vol8iss1pp1-6.

[15] E. D. Madyatmadja, T. R. Yulia, D. J. M. Sembiring, and S. M. B. P. Angin, "Iot usage on smart campus: A systematic literature review," *International Journal of Emerging Technology and Advanced Engineering*. 2021. doi: 10.46338/IJETAE0521_06.

[16] S. L. Tuladhar, D. Pradhan, U. Parajuli, P. Manandhar, and N. Subedi, "Study on the effectiveness of online classes for undergraduate medical and dental students of Gandaki Medical College during COVID 19 pandemic period in Nepal," *Orthod. J. Nepal*, 2020, doi: 10.3126/ojn.v10i2.31146.

[17] M. K. SAEED, A. M. SHAH, K. MAHMOOD, M. UL HASSAN, J. KHAN, and B. NAWAZ, "Usage of internet of things (iot) technology in the higher education sector," *J. Eng. Sci. Technol.*, 2021.

[18] D. Fu, L. Chen, and Z. Cheng, "Integration of wearable smart devices and internet of things technology into public physical education," *Mob. Inf. Syst.*, 2021, doi: 10.1155/2021/6740987.

[19] B. P. Sahoo, A. Gulati, and I. U. Haq, "Covid 19 and Challenges in Higher Education: An Empirical Analysis," *Int. J. Emerg. Technol. Learn.*, 2021, doi: 10.3991/ijet.v16i15.23005.

[20] C. Serban and I. A. Todericiuaa, "Alexa, What classes do I have today? The use of artificial intelligence via smart speakers in education," in *Procedia Computer Science*, 2020. doi: 10.1016/j.procs.2020.09.269.

[21] S. O. Hughes *et al.*, "Pairing Feeding Content With a Nutrition Education Curriculum: A Comparison of Online and In-Class Delivery," *J. Nutr. Educ. Behav.*, 2019, doi: 10.1016/j.jneb.2019.11.004.

[22] S. Ni'mah, N. Hasan, and D. F. Wiyono, "VICRATINA : Jurnal Pendidikan Islam Volume 6 Nomor 4 Tahun 2021 e-ISSN: 2087 – 0678X," *VICRATINA J. Pendidik. Islam*, 2021.

[23] A. Zaguia, D. Ameyed, M. Haddar, O. Cheikhrouhou, and H. Hamam, "Cognitive IoT-Based e-Learning System: Enabling Context-Aware Remote Schooling during the Pandemic," *J. Healthc. Eng.*, 2021, doi: 10.1155/2021/7358874.

[24] D.-H. Lee and J.-H. Chin, "A Study on the Application Effect of Using Smart Phone App in Physical Education Class," *Korean Soc. Holist. Converg. Educ.*, 2020, doi: 10.35184/kshce.2020.24.4.97.

CHAPTER 11

AWARENESS OF ROAD SAFETY AND TRAFFIC RULES AMONG FOUR MAJOR CITIES OF INDIA: A SURVEY REPORT

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ABSTRACT: ***The frequency of traffic accidents in India is steadily growing and the primary cause of road accidents is hasty driving and failure to respect traffic laws. The driver on the highway is alerted by notice boards installed on the side of the road of a risky bend or speed restriction. In this research, the author discussed the lack of awareness of traffic rules drivers do not follow rules and obey traffic signs which results in road accidents. The author applied a methodology in which they conducted a survey in which vehicle parking spaces of various educational establishments, government and commercial offices, local markets, malls, multiplexes, and restaurants in several cities were visited by survey volunteers. Jaipur, Delhi, Noida, and Udaipur were among the cities visited by surveyors. The results show to put a check on road accidents, it is required to make people aware of traffic rules and the importance of following traffic signs. The author concludes that to determine the awareness of people about traffic rules a survey was conducted. Survey candidates who were not aware were made aware of traffic rules. This paper's future promise is that it revealed that by increasing public awareness, a significant number of those who had previously broken traffic laws began to do so, and also this paper allows for additional road safety awareness initiatives to take place.***

KEYWORDS: ***Awareness, Candidates, Safety, Traffic, Traffic Signs.***

1. INTRODUCTION

It is critical to observe traffic rules to ensure a smooth flow of traffic. The purpose of traffic laws is to keep both the driver and the passenger safe while traveling. A driver's license is necessary to operate a car on public roads [1]–[3]. People over the age of 18 are granted a driver's license. A learner license is granted to the licensing applicant before the issuance of the license. After passing a driving test and a traffic rules awareness exam, the candidate is awarded a permanent license [4]–[7]. However, in certain situations, the procedure is not followed, and a driver's license is provided to an application without checking that the applicant is knowledgeable of traffic rules. A breach of traffic rules is considered a criminal offense.

- When driving on a two-way road, the driver must keep the car on the left side of the road to allow for smooth traffic flow from the right side [8]–[10].
- When driving on a one-way road, the motorist is only authorized to overtake another car from the right side.
- When making a right turn, a motorist must keep the vehicle on the right side of the road. If the car is on the middle or left side of the road, the driver must gradually move the vehicle to the chosen side [11]–[13]. When driving past a road crossing, a pedestrian crossing, a crossroads, a school zone, or a hospital, the driver must slow down the vehicle [14]–[16].

During the awareness session, the author talked about the harm that a car accident can do to a person as well as the annual statistics on how many people die as a result of car accidents. All applicants who had previously been ignorant of traffic laws and signage. These applicants

were asked to recollect any instances in which they may have observed traffic signs while operating a car in their city. All of the applicants claimed that they disregarded roadside traffic signs because they were unaware of the laws of the road and were less mindful of the harm that may occur from disobeying them.

To evaluate the effects of educating applicants who had not previously been aware of traffic regulations.

2. LITERATURE REVIEW

Brandt et al. in their study embellished that cell phone usage is believed to distract bikers, perhaps increasing the danger of an accident. Brandt et al. applied a methodology in which they surveyed the biker. As a result, in certain nations, bicycles are prohibited from using portable phones, even though riders employ compensatory methods to reduce distractions and their consequences. Bicyclists' phone use has been linked to demographics, geographical, and emotional problems. The author concludes that the purpose of this study is to examine the impact of a computer game primarily geared for elementary school children's education. The goal was to educate pupil's traffic rules through a virtual gaming experience. It was discovered that kids learned driving behaviour as a result of playing the game. Users also said that they prefer to learn driving rules by playing a game. As a result, games may be utilized to teach traffic skills and promote a safe driving culture.

Tang et al. in their study illustrate that all the respondents were having a driving license and all were aware of the documents that are required to be carried while driving. Tang et al. applied a methodology in which they stated that the majority of drivers of Saudi Arabia knew about the colors of traffic signals. But the majority of drivers showed a lack of awareness about the rules and regulations of traffic. The results show in India, the majority of drivers were carrying a driving license and were aware of the documents required to be carried while driving. But almost 50% of drivers were aware of the rules and regulations of traffic. The author concludes that Electric scooters have been a popular method of transportation in India during the last decade, and e-bike-related accidents have skyrocketed. According to research, traffic rule breaches by e-bike riders are the primary cause of most of these incidents, and certain e-bike riders have a higher tendency to be accidents involving than otherwise equivalent persons [17].

Koschi et al. in their study embellish that for autonomous road vehicles, the manifestly safe proposed methodology must ensure certain programmed activities do not result in a confrontation with certain other traffic participants. The author applied a methodology in which they stated that the framework included information regarding traffic rules of various nations. The framework suggested is suitable to be used by machines as well as human beings. The results show because the future behaviour of some of the other drivers on the road is unknown, and because traffic participants are frequently concealed owing to occlusions, this is a key difficulty in autonomous driving. The author concludes that the framework is suitable for automatic vehicles in various nations with varied rules for traffic. The framework is designed in such a way that it is suitable for urban as well as rural areas including highway driving. The framework is suitable for junctions having a high load of traffic [18].

In this research, the author elaborates the majority of drivers demonstrated a lack of understanding of traffic norms and regulations. The findings demonstrate that the majority of drivers in India had a valid driver's license and were aware of the paperwork that must be carried when driving. However, over half of the drivers were aware of traffic rules and regulations. Electric scooters have been a popular mode of transportation in India over the

last decade, and e-bike-related accidents have risen, according to the author. According to studies, e-bike riders breaking traffic rules are the primary cause of the majority of these occurrences, and particular e-bike riders have a greater risk of being involved in accidents than otherwise comparable people.

Research Questions:

- How the management of traffic rules is important in the modern era?
- How does traffic rule help people to avoid the accident?
- How the traffic management plays a major goal in day-to-day life?

3. METHODOLOGY

3.1.Design:

To determine the awareness of people regarding traffic rules, a survey was conducted. The survey was carried out by survey volunteers, the survey volunteers visited vehicle parking areas of various educational institutes, vehicle parking areas of various government and private offices, vehicle parking areas of various local markets, vehicle parking areas of malls, multiplex, and restaurants of various cities. Survey candidates visited cities including Jaipur, Delhi, Noida, and Udaipur. The survey candidates randomly asked people if they drive a vehicle or not. Further, the candidate who drives vehicle were asked about their will of taking part in the survey.

3.2. Sample and Instrument:

Candidates who expressed an interest in participating in the survey were given a questionnaire form. Table 1 depicts the questionnaire form supplied to survey participants to assess their knowledge of traffic rules. Candidates' responses to a questionnaire form were gathered and analyzed to assess how well they knew about traffic laws. After collecting questionnaire forms from survey participants, survey workers in all cities, including Jaipur, Delhi, Noida, and Udaipur, presented each survey participant with a piece of paper with a list of traffic signs. The array of traffic signs displayed to survey applicants to measure their understanding of traffic regulations is depicted in Figure 1 all survey participants were asked which traffic sign is located on which city route. For example, which road is one-way, which vehicles are forbidden in which region, which road prohibits left/right turns, which road prohibits U-turns, which road prohibits overtaking, and so on candidates' responses were recorded on a piece of paper that was attached to the questionnaire form.

Table 1: Show the questionnaire form given to survey candidates to analyse their awareness regarding Traffic Rules [19]**.**

Name: Gender: Age: Profession:		
	Traffic Rules	**Response of survey candidates**
1	Do you know driving without a license is not allowed?	No:

		Yes: Fine Amount:
2	Do you know driving after consuming alcohol is not allowed?	No: Yes: Fine Amount:
3	Do you know driving a vehicle without having insurance of vehicle is not allowed?	No: Yes: Fine Amount:
4	Do you know exceeding the defined speed limit is not allowed?	No: Yes: Fine Amount:
5	Do you know driving without putting seatbelt is not allowed?	No: Yes: Fine Amount:
6	Do you know riding without wearing a helmet is not allowed?	No: Yes: Fine Amount:
7	Do you know racing in regular traffic areas is not allowed?	No: Yes: Fine Amount:
8	Do you know driving by a minor person is not allowed?	No: Yes: Fine Amount:
9	Do you know not giving way to an emergency vehicle is not allowed?	No: Yes: Fine Amount:
10	Do you know rash driving of a vehicle is not allowed?	No: Yes: Fine Amount:

A total of 100 candidates participated in the survey from each city including Jaipur, Delhi, Noida, and Udaipur. All the candidates were divided into four groups based on their profession. 25 candidates were considered in the first group of students, 25 candidates were considered in the second group of working people, 25 candidates were considered in the third group of elderly people, and 25 candidates were considered in the fourth group of professional drivers (cab/bike drivers).

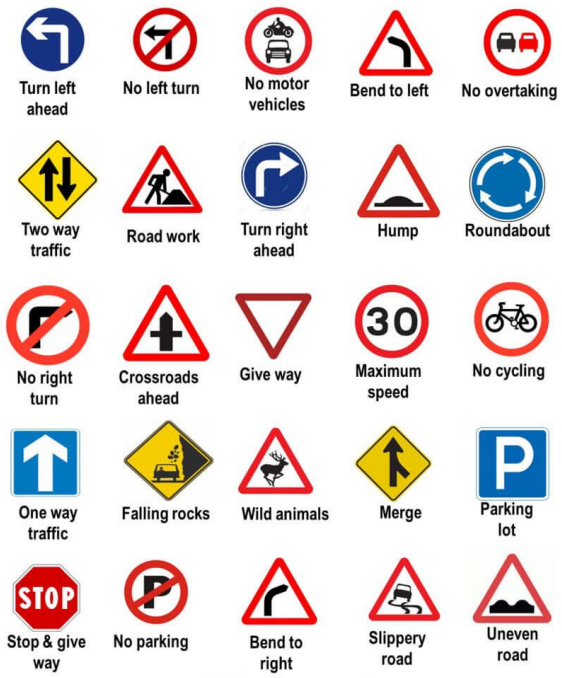

Figure 1: Illustrates the list of traffic signs that were shown to survey candidates to determine their awareness of traffic rules in them.

3.3.Data Collection:

In Jaipur, a total of 100 survey candidates participated in the survey, out of 25 candidates who were considered in the first group of students (18 to 25 years), 12 candidates were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire form and the candidate who correctly answered the position of all traffic signs in the city. Out of 25 candidates who were considered in the second group of working people (26 to 60 years), 16 candidates were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire form and also the correctly answered position of all traffic signs in the city.

Out of 25 candidates who were considered in the third group of elderly people (61 to 75 years), 17 candidates were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidates in the questionnaire form and also correctly answered the position of all traffic signs in the city. Figure 2 Give an idea of the total number of candidates who participated in the survey and the candidates who were aware of the traffic rules form and also the correctly answered position of all traffic signs in the city. Out of 25 candidates who were considered in the fourth group of professional drivers (cab/bike drivers) 18 candidates

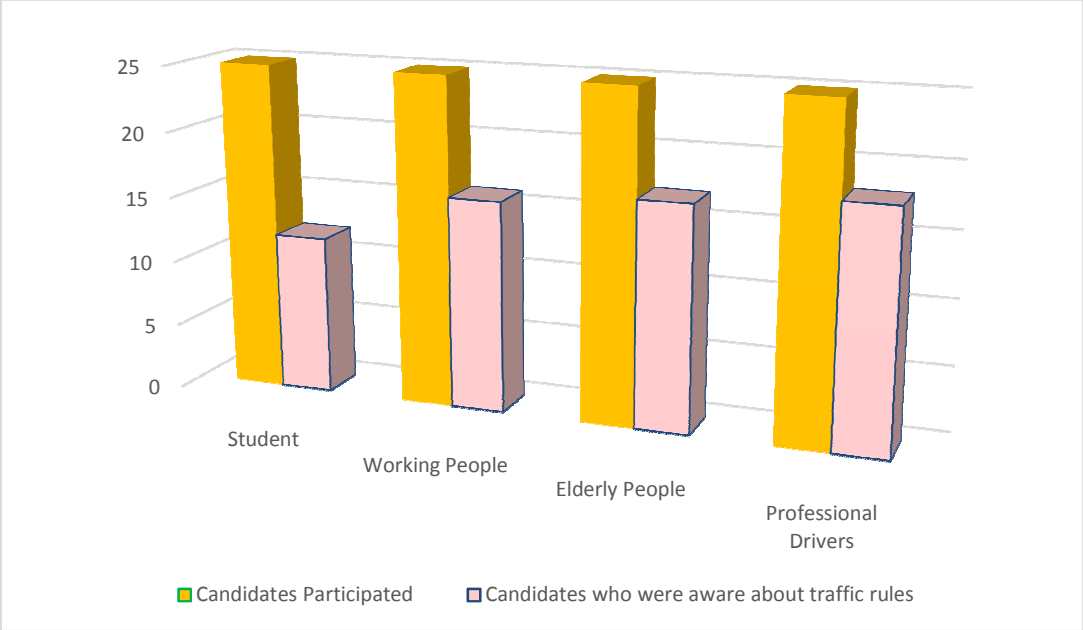

Figure 2: Illustrates an idea of the total number of candidates who participated in the survey and the candidates who were aware of the traffic rules.

3.4.Data Analysis:

In Delhi, a total of 100 survey candidates participated in the survey, out of 25 candidates who were considered in the first group of students (18 to 25 years), 10 candidates were determined to be completely aware of the traffic rules.

The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire form and the candidate who correctly answered the position of all traffic signs in the city. Out of 25 candidates who were considered in the second group of working people (26 to 60 years), 18 candidates were determined to be completely aware of the traffic rules.

The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire form and also the correctly answered position of all traffic signs in the city. Out of 25 candidates who were considered in the third group of elderly people (61 to 75 years), 20 candidates were determined to be completely aware of the traffic rules.

The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire form and also the correctly answered position of all traffic signs in the city. Out of 25 candidates who were considered in the fourth group of professional drivers (cab/bike drivers) 19 candidates were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidates in the questionnaire form and also the correctly answered position of all traffic signs in the city. Figure 3 give an idea of the total number of candidates who participated in the survey and the candidates who were aware of the traffic rules.

Figure 3: Illustrates an idea of the total number of candidates who participated in the survey and the candidates who were aware of the traffic rules.

In Noida, a total of 100 survey candidates participated in the survey, out of 25 candidates who were considered in the first group of students (18 to 25 years), 7 candidates were determined to be completely aware of the traffic rules.

The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire form and the candidate who correctly answered the position of all traffic signs in the city. Out of 25 candidates who were considered in the second group of working people (26 to 60 years), 10 candidates were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire form and also the correctly answered position of all traffic signs in the city.

Out of 25 candidates who were considered in the third group of elderly people (61 to 75 years), 12 candidates were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire form and also the correctly answered position of all traffic signs in the city. Out of 25 candidates who were considered in the fourth group of professional drivers (cab/bike drivers) 16 candidates were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidates in the questionnaire form and also correctly answered the position of all traffic signs in the city. Figure 4: Give an idea of the total number of candidates who participated in the survey and the candidates who were aware of the traffic rules.

In Udaipur, a total of 100 survey candidates participated in the survey, out of 25 candidates who were considered in the first group of students (18 to 25 years), 8 candidates were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire form and the candidate who correctly answered the position of all traffic signs in the city. Out of 25 candidates who were considered in the second group of working people (26 to 60 years), 14 candidates were determined to be completely aware of the traffic rules. The awareness of

candidates was determined based on all correct answers given by the candidate in the questionnaire form and also the correctly answered position of all traffic signs in the city.

Out of 25 candidates who were considered in the third group of elderly people (61 to 75 years), 16 candidates were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidate in the questionnaire form and also the correctly answered position of all traffic signs in the city. Out of 25 candidates who were considered in the fourth group of professional drivers (cab/bike drivers) 15 candidates were determined to be completely aware of the traffic rules. The awareness of candidates was determined based on all correct answers given by the candidates in the questionnaire form and also the correctly answered position of all traffic signs in the city. Figure 5 gives an idea of the total number of candidates who participated in the survey and candidates who were aware of the traffic rules.

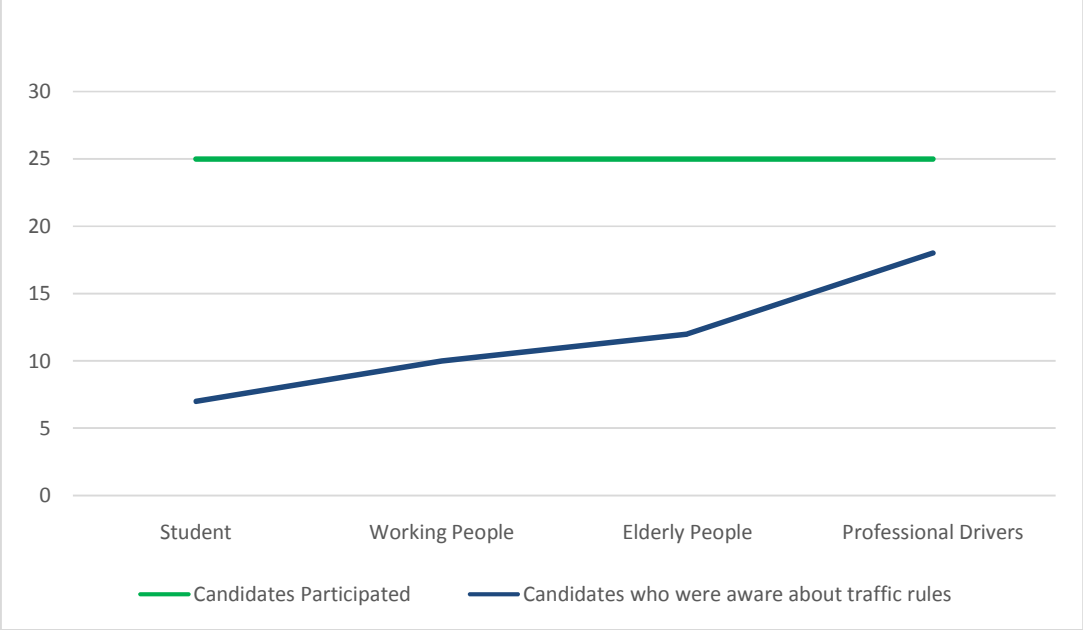

Figure 4: Embellishes an idea of the total number of candidates who participated in the survey and the candidates who were aware of the traffic rules.

Further, the candidates who were not aware of the traffic rules and traffic signs were made aware of the rules and traffic signs. The statistical data of road accidents and loss caused to people as a result of not following traffic rules and traffic signs are discussed with people. After discussion, candidates said that because of a lack of awareness of loss caused due to road accidents, they failed to follow traffic rules. These candidates also said that because of a lack of awareness they did not notice traffic signs on roads. These candidates also accepted that now they will follow traffic rules and will drive following road signs.

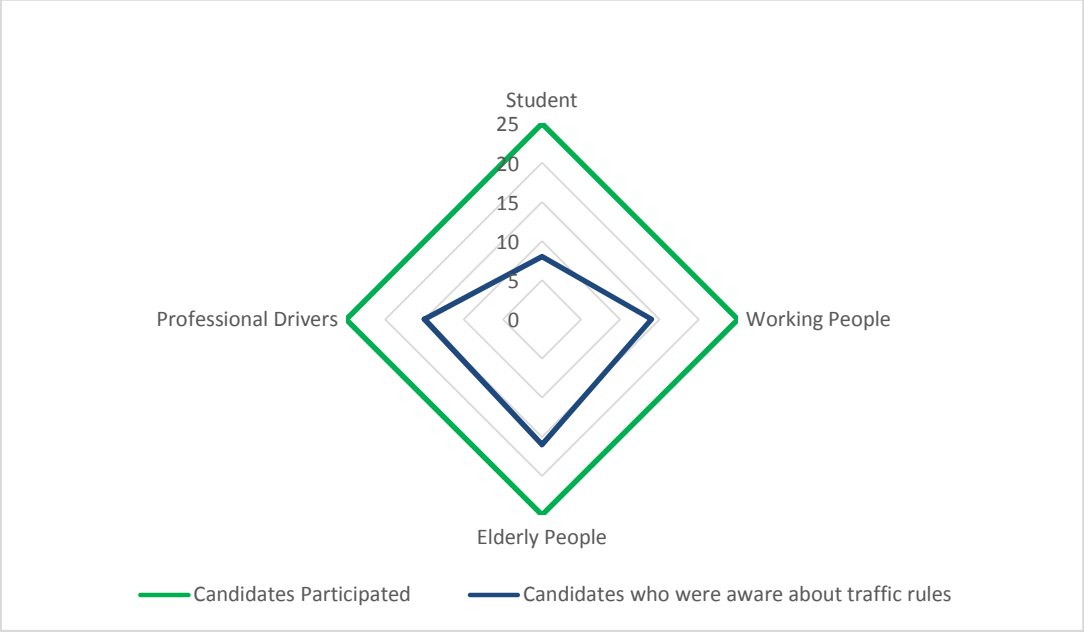

Figure 5: Discloses an estimate of the total number of candidates who took part in the survey and those who were knowledgeable of the traffic regulations.

4. RESULT AND DISCUSSION

Traffic rules are made to ensure safe and smooth driving on roads. But due to a lack of awareness of drivers about traffic rules and traffic signs they don't follow traffic rules and signs which results in road accidents. To reduce the number of road accidents and analyze the awareness of people regarding traffic rules and signs a survey was conducted. The survey involved analyzing the awareness of various groups of people by a questionnaire form and asking about traffic signs in their city. The candidates who were not aware of traffic rules and traffic signs were provided an awareness session. The awareness session included discussing the damage caused to a person after a road accident and the statistical data on many deaths caused due to road accidents every year. All the candidates who were earlier not aware of the traffic rules and traffic signs. These candidates were asked to recall if they have seen traffic signs in their city while driving the vehicle. All the candidates said because of a lack of awareness of traffic rules and less knowledge of damage caused as a result of not following traffic signs they ignored traffic signs mentioned on the roadside.

To analyze the impact of awareness provided to candidates who were earlier not aware of traffic rules. A list of traffic signs was shown to candidates and was again asked if they remember where they have seen these signs in their city. A significant number of candidates showed a positive response and accurately responded regarding the location of various traffic signs in their city. A total of 63 candidates who were students were not aware of the traffic rules and traffic signs. These candidates were residing in various cities including Jaipur, Delhi, Noida, and Udaipur. After providing awareness of traffic rules and signs out of 63 candidates 56 candidates answered the location of various traffic signs in their city correctly. A total of 42 candidates who were working people (26 to 60 years) were not aware of the traffic rules and traffic signs. These candidates were residing in various cities including Jaipur, Delhi, Noida, and Udaipur. After providing awareness of traffic rules and signs out of 42 candidates 38 candidates answered the location of various traffic signs in their city correctly. A total of 35 candidates who were elderly people (61 to 75 years), were not aware of the traffic rules and traffic signs.

These candidates were residing in various cities including Jaipur, Delhi, Noida, and Udaipur. After providing awareness of traffic rules and signs out of 35 candidates 30 candidates answered the location of various traffic signs in their city correctly. A total of 32 candidates who were professional drivers (Bike/cab drivers), were not aware of the traffic rules and traffic signs. These candidates were residing in various cities including Jaipur, Delhi, Noida, and Udaipur. After providing awareness of traffic rules and signs out of 32 candidates 30 candidates answered the location of various traffic signs in their city correctly. Thus the data clearly shows that after providing awareness of traffic rules and traffic signs a significant number of people who were earlier not aware of traffic rules and signs showed awareness of traffic signs by correctly answering the location of traffic signs in their city. These candidates also said that they will never break traffic rules now and will follow all signs without fail. Table 2: Show the total number of candidates who were not aware of the traffic rules and after providing information about traffic rules candidates showed awareness about traffic rules.

Table 2: Show the total number of candidates who were not aware of the traffic rules and after providing information about traffic rules candidates showed awareness about traffic rules.

	Total number of survey candidates who were not aware of traffic rules in all cities	Total number of candidates who correctly answered the location of traffic signs in their city, after providing awareness of traffic rules and traffic signs
Students (18 to 25 years)	63	56
Working people (26 to 60 years)	42	38
Elderly People (61 to 75 years)	35	30
Professional Drivers (cab/bike drivers)	32	30

5. CONCLUSION

The government creates traffic rules to ensure road safety and a pleasant driving experience. However, because of a lack of understanding of traffic laws and signage, drivers fail to adhere to them, resulting in road accidents. The loss suffered by the person involved in a car accident is irreplaceable. Only a few people lose their legs or die in car accidents. An investigation of people's understanding of traffic regulations and signage was done to lessen the number of road accidents that occur each year. The survey entailed using a questionnaire form to assess the knowledge of various groups of individuals and inquiring about traffic signs in their city. The candidates who were not aware of traffic rules and traffic signs were provided an awareness session. During the awareness session, people were told about road accidents that happen as a result of not following traffic rules. The loss caused to people meets road accidents.

As a result of the awareness plan, people who were earlier not aware of traffic rules and traffic signs showed a positive response and were assured that they will follow traffic rules

and traffic signs. All the candidates said that due to a lack of awareness they ignore traffic signs that are present on the roadside.As a consequence of the public awareness campaign, a large number of individuals remembered traffic signs they had seen in their city and pledged to observe all regulations in order to preserve road safety and minimise the number of road fatalities that occur each year. The future potential of this paper is it demonstrated that by raising public knowledge, a considerable percentage of persons who had previously disobeyed traffic regulations began to do so. As a result, the new document opens the door to more road safety awareness activities.

REFERENCES

[1] H. Yuan and G. Li, "A Survey of Traffic Prediction: from Spatio-Temporal Data to Intelligent Transportation," *Data Science and Engineering*. 2021. doi: 10.1007/s41019-020-00151-z.

[2] W. Yao and S. Qian, "From Twitter to traffic predictor: Next-day morning traffic prediction using social media data," *Transp. Res. Part C Emerg. Technol.*, 2021, doi: 10.1016/j.trc.2020.102938.

[3] V. Astarita and V. P. Giofré, "From traffic conflict simulation to traffic crash simulation: Introducing traffic safety indicators based on the explicit simulation of potential driver errors," *Simul. Model. Pract. Theory*, 2019, doi: 10.1016/j.simpat.2019.03.003.

[4] Z. H. Khan and T. A. Gulliver, "A macroscopic traffic model for traffic flow harmonization," *Eur. Transp. Res. Rev.*, 2018, doi: 10.1186/s12544-018-0291-y.

[5] D. P. Sakas and D. P. Reklitis, "The impact of organic traffic of crowdsourcing platforms on airlines' website traffic and user engagement," *Sustain.*, 2021, doi: 10.3390/su13168850.

[6] S. S. S. M. Qadri, M. A. Gökçe, and E. Öner, "State-of-art review of traffic signal control methods: challenges and opportunities," *European Transport Research Review*. 2020. doi: 10.1186/s12544-020-00439-1.

[7] R. Shone, K. Glazebrook, and K. G. Zografos, "Applications of stochastic modeling in air traffic management: Methods, challenges and opportunities for solving air traffic problems under uncertainty," *European Journal of Operational Research*. 2021. doi: 10.1016/j.ejor.2020.10.039.

[8] J. Zhu, Q. Wang, C. Tao, H. Deng, L. Zhao, and H. Li, "AST-GCN: Attribute-augmented spatiotemporal graph convolutional network for traffic forecasting," *IEEE Access*, 2021, doi: 10.1109/ACCESS.2021.3062114.

[9] A. Gounaridou, E. Siamtanidou, and C. Dimoulas, "A serious game for mediated education on traffic behavior and safety awareness," *Educ. Sci.*, vol. 11, no. 3, 2021, doi: 10.3390/educsci11030127.

[10] Y. Kitamura, M. Hayashi, and E. Yagi, "Traffic problems in Southeast Asia featuring the case of Cambodia's traffic accidents involving motorcycles," *IATSS Research*. 2018. doi: 10.1016/j.iatssr.2018.11.001.

[11] I. Ištoka Otković, B. Karleuša, A. Deluka-Tibljaš, S. Šurdonja, and M. Marušić, "Combining traffic microsimulation modeling and multi-criteria analysis for sustainable spatial-traffic planning," *Land*, 2021, doi: 10.3390/land10070666.

[12] Z. Chen, B. Wu, B. Li, and H. Ruan, "Expressway Exit Traffic Flow Prediction for ETC and MTC Charging System Based on Entry Traffic Flows and LSTM Model," *IEEE Access*, 2021, doi: 10.1109/ACCESS.2021.3070625.

[13] J. C. Pérez-Sansalvador, N. Lakouari, J. Garcia-Diaz, and S. E. P. Hernández, "The effect of speed humps on instantaneous traffic emissions," *Appl. Sci.*, 2020, doi: 10.3390/app10051592.

[14] M. Aslani, M. S. Mesgari, and M. Wiering, "Adaptive traffic signal control with actor-critic methods in a real-world traffic network with different traffic disruption events," *Transp. Res. Part C Emerg. Technol.*, 2017, doi: 10.1016/j.trc.2017.09.020.

[15] Y. Zuo, Y. Wu, G. Min, and L. Cui, "Learning-based network path planning for traffic engineering," *Futur. Gener. Comput. Syst.*, 2019, doi: 10.1016/j.future.2018.09.043.

[16] P. Wang, J. Lai, Z. Huang, Q. Tan, and T. Lin, "Estimating Traffic Flow in Large Road Networks Based on Multi-Source Traffic Data," *IEEE Trans. Intell. Transp. Syst.*, 2021, doi: 10.1109/TITS.2020.2988801.

[17] T. Tang, Y. Guo, X. Zhou, S. Labi, and S. Zhu, "Understanding electric bike riders' intention to violate traffic rules and accident proneness in China," *Travel Behav. Soc.*, 2021, doi: 10.1016/j.tbs.2020.10.010.

[18] M. Koschi and M. Althoff, "Set-Based Prediction of Traffic Participants Considering Occlusions and Traffic Rules," *IEEE Trans. Intell. Veh.*, 2021, doi: 10.1109/TIV.2020.3017385.

[19] N. A. Singh, “Sentiment analysis on motor vehicles amendment act, 2019 an initiative by government of India to follow traffic rule,” in *2020 International Conference on Computer Communication and Informatics, ICCCI 2020*, 2020. doi: 10.1109/ICCCI48352.2020.9104207.

CHAPTER 12
IMPACT OF ALCOHOLIC BEVERAGES ON DIETARY HABITS

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ABSTRACT: ***The liquid by-product of the fermentation of several fruits and grains is alcoholic beverages. The fermentation process is carried out under varied circumstances, and various kinds of alcohol are created. Distilled alcohol and undistilled alcohol are the two most popular types of alcohol. In this paper, the author discussed the statistics for alcohol-related illnesses and fatalities are relatively high worldwide. But in many nations across the world, alcohol is drunk with meals. As a result, it's important to examine both alcohol's negative effects and its potential advantages in terms of illness prevention. The author concludes that the worldwide health risks brought on by excessive alcohol intake as well as the health advantages brought on by moderate alcohol consumption. Thus, the current work creates opportunities for future research on the advantages and risks of different distilled and undistilled alcohol for health.***

KEYWORDS: ***Alcohol, Beer, Distilled, Un-distilled, Wine, Health Effects.***

1. INTRODUCTION

Alcoholic beverages are liquids made through fermentation, and there are two main categories: distilled alcohol and undistilled alcohol. Examples of distilled alcohol include Absinthe, Brandy, Everclear, Gin, Rum, Tequila, Vodka, and Whiskey. Beverages that haven't been distilled include wine, beer, rough cider, mead, and sake. The fermentation procedure results in the production of ethanol. Ethanol, which is produced by alcohol, is what causes intoxication. Numerous fruits, grains, and berries, as well as plant saps, honey, tubers, and milk, are all fermented throughout the fermentation process. Distillation creates alcoholic liquid with a high proof level. When malt grain is fermented, beer is produced. Maize hops and rice are other ingredients needed to manufacture beer. Beer includes alcohol in quantities between 2 and 8% [1], [2].

Wine is produced by fermenting grapes together with other fruits such as plums, cherries, apples, and berries. Fruit juice is fermented at extremely high temperatures in big pots. Wine contains between 8% and 14% alcohol by volume. Beer consumption has been associated with several advantageous health outcomes, including the removal of pollutants, an extension of life, gorgeous skin and hair, improved bone density, and a reduced risk of heart disease. Fruits, grains, and a few other substances are the first steps in the creation of distilled alcohol, such as absinthe, brandy, Everclear, gin, rum, tequila, vodka, and whiskey. Grain is fermented, and the fermented liquid is heated during the process. The heating process of the liquid continues until the alcohol and flouring that are present in the liquid evaporate [3]–[5].

The liquid that has evaporated is condensed back into liquid form after cooling. The water content of the liquid is separated. Although high- and low-alcohol alcohol are also offered for sale, the majority of alcohol contains between 40% and 50% alcohol. The reduction of recurrent colds, an increase in blood clotting in those who regularly consume alcohol in moderation, protection against cardiovascular diseases, an improvement in the brain's capacity to handle stress, and prevention of diseases like dementia are just a few of the health advantages of moderate alcohol consumption. The numerous advantages of consuming modest amounts of alcohol, including beer and undistilled alcohol, are listed in Table 1.

Table 1: Embellish the various health benefits of consumption of distilled alcohol and un-distilled alcohol in moderate quantity and consumption of beer.

Types of Alcohol:	***Benefits of Beer:***
Un-distilled Alcohol – Beer, Hard Cider, Mead, Sake, and Wine	• Beer removes the toxins that are present in the body. The diuretic property of beer raises the removal of toxins from the body by raising urination. • Increases longevity by causing delays in aging. The Vitamin E level in the blood raises and the effect of Vitamin E on hair, nails, and skin also improves physical appearance. • The vitamins found in Beer prevent the onset of acne and other skin-related issues. These increase the glow of skin and hair. • The Nicotinic acid and lactoflavin present in beer make the person feel sleepy. • Raises blood level of Vitamin B, out of Vitamin B complex, many Vitamins are present in Beer. Vitamin B6 present in Beer reduces the risk of a heart ailment. The heart ailment is reduced by keeping a check on the formation of homocysteine amino acids in the body. • Bone health is improved, and bone gets healthier and denser because of the presence of silicone, thus increasing bone density. Beer also reduces the risk of osteoporosis. • The presence of minerals like Magnesium, Potassium minimizes the risk of development of kidney stones. In beer, 90% water is present which primarily works in the prevention of the development of kidney stones. According to a study, drinking one bottle of beer every day has shown a reduced risk of developing kidney stones by 40%. • The risk of occurrence of diabetes reduces, it is observed that people who consume beer are at reduced risk of getting affected with diabetes of type-2, the study was conducted at Harvard School. • The damage to the mitochondria of the eyes is prevented by antioxidants and enzymes present in beer. A study at the University of Western Ontario stated that a beer a day can reduce the danger of developing cataracts. • Drinking beer increases the amount of dopamine released in the brain, thus, beer is proven to be protective against developing the diseases like Alzheimer's and Parkinson's.

Benefits of Drinking Distilled Alcohol – Absinthe, Brandy, Everclear, Gin, Rum, Tequila, Vodka, and Whiskey.	• Consuming two units of alcohol per day minimizes the danger of getting gall stone by one-third. The researchers showed that moderate consumption of alcohol showed health benefits. • The journal Neuropsychiatric Disease and Treatment showed that people who drink a moderate quantity of alcohol were less prone to suffer from dementia and other diseases. The small quantity of alcohol makes cells of the brain fit and prepare to bear stress and make them strong to bear severe stress. • It is observed that after moderate consumption of alcohol, the number of cases of the common cold is observed to be reduced in number. An intake of 8 to 14 glasses of red wine every week reduces the risk of suffering from the common cold. Scientists believe that the antioxidant properties of wine may prevent from developing cold. • As a part of the Mediterranean diet, alcohol, and wine was consumed with meal preferably lunch, and the rest of the day was spent alcohol-free. Drinking 2 to 4 drinks per day reduced the risk of death by 18 percent in both men and women. • Reduce the danger of cardiovascular diseases. Consuming alcohol in moderate quantities increases the level of high-density lipoprotein, Good cholesterol, and HDL in the blood. Thus HDL prevents the heart from ailments. • A moderate quantity of alcohol is also linked with an improved rate of blood clotting, and better function of insulin hormone. This prevents the clotting of blood in arteries and causes heart attack, brain stroke, etc.

Global Statistics of Health Hazards as a result of excess consumption of Alcohol:

- More than 200 ailments are directly or indirectly related to overconsumption of alcohol.
- Globally, every year, more than 3 million people die as a result of excess consumption of alcohol. This contributes to 5.3% of all deaths caused across the world.
- Excess consumption of alcohol results in disability and death in people at an early age in life. The highly affected age group belongs from 20 to 39 years.
- Nearly 13.5% of deaths caused every year are due to excess consumption of alcohol.
- Many mental ailments are caused as a result of excess consumption of alcohol [6]–[8]. There is a strong relationship between mental ailment and behavioral problems, non-communicable issues, and injuries.
- Excess consumption of alcohol is linked with unconscious behavior and it is also observed that there is a strong link between alcohol consumption spread of diseases like tuberculosis and HIV/AIDS.
- Adding to health issues, excess consumption of alcohol is linked with significant loss at an economic level and also hampers a person's image at a social level.

2. LITERATURE REVIEW

Ramalho and Rodrigo in their study embellish that to provide a narrative evaluation of the paper covering alcohol use and issues connected to alcohol during the Coronavirus disease 2019 (COVID-19) pandemic. The author applied methods in which databases were searched. Alcohol and COVID were the two terms used in this search. To find further papers, reference lists of papers were examined. The results show concerns about rising alcohol consumption and the negative effects of alcohol are becoming more widespread. The author concludes that these worries center on the effects of heavy drinking in individuals with COVID-19 and/or alcohol use disorders, as well as a potential rise in the predominance of harmful drinking, caffeine use disorders, withdrawal symptoms, violence against intimate partners, injury to children, suicide, psychiatric problems, and non-communicable diseases [9].

Tyrovolas et al. in their study illustrate that the information from the Aging population Dynamics of Mental wellbeing and Correlational Advantages and Strategic partnerships examined the relationship between alcohol use and healthy aging. Tyrovolas et al. applied a methodology in which they take a harmonized dataset, which contains data from people 37 and older in 60 countries, which was examined for the objectives of this study (n = 475,840). The results show three harmonized variables were used to reflect alcohol consumption frequency of consumption, present alcohol drinker status, and prior alcohol drinker status. The author concludes that to create a particular health indicator, a set of 41 personality health categories and measurable tests were employed. The prevalence of present drinking was 67.7% in the synchronized dataset, whereas the proportion of prior drinking was 56.85%. Current alcohol use was positively connected with improved health in the combined group [10].

Lee et al. in this study embellish that a population-based sample of adult South Koreans were used to explore the relationship between alcohol consumption habits and diabetes mellitus and its components. The author applied a methodology in which they stated that 42,630 daily consumers who have at least 20 years old were included in the cross-sectional research. The results show over the previous year, measures of alcohol use characteristics include average drinking frequency, typical amount, and binge drinking frequency. The author concludes that to calculate factor loadings and 78 percent confidence estimates for starting on alcohol use habits and to look at analyzing the process in these correlations, logistic regression was used [11].

This paper elaborates on the effects of heavy drinking in people with COVID-19 and/or alcohol use disorders, as well as a potential increase in the prevalence of harmful drinking, energy drink use dysfunction, physical dependence, victimization against heterosexual relationships, injury to children, suicide, psychiatric problems, and non-communicable pathogens are the main concerns, according to the author.

3. DISCUSSION

To analyze the effects of excessive distilled alcohol intake, moderate alcohol consumption, as well as the effects of beer on an individual's health. Table 2 is a list of the biggest breweries in the world. Some of the major manufacturers of beer and non-distilled alcohol globally include Anheuser-Bush-InBev, Heineken, China Resources Snow Breweries, Carlsberg, Molson-Coors-Brewing, Tsingtao Brewery Group, Asahi, Yanjing, Kirin, and Groupe Castel. The brands are well-known both in their nation of origin and elsewhere. Few of the brands are more than 100 years old whereas few newly established beer brands have entered the competitive market and established their name amongst the beer drinkers.

Table 2:Illustrates the lists of the largest beer manufacturing companies in the world [12]**.**

Sl. No.	Company/Beer Brand	Beer market at global level
1.	Anheuser-Bush-InBev	The largest manufacturer of beer have reported surprising growth and profitability in the year 2018, the organization is based in Belgium has left his competitors and now it has reached at the top rank of global market of beer. Thus made the company biggest company of beer across the globe [12].
2.	Heineken	The organization is based in Dutch, the brand is the brewing leader across the globe. The company is holding the tag of brewing leader from last 150 years. Now, the company is the 2nd brewing leader across the globe and top brewing leader in Europe. The organization is increasing the manufacturing of beer by using new technologies like Artificial Intelligence. The company sells more than 8.5 barrels of beer every year. Since 1864, in more than 70 countries, 160 breweries have been set up by the company [12].
3.	China-Resources-Snow-Breweries	The company is based in China, Hong Kong. The beer business of the organization holds around 20% of total beer market of China. The widely known brand of the company is Snow, the highest selling brand of beer. The company has 98 breweries in 25 areas of China. The company produces 20 million kilolitre of beer per year. The company is the joint venture between two organizations China-Resources-Enterprises and SABMiller [12].
4.	Carlsberg	The company is established by J.C.Jacobsen in 1847. The company is one of the top organizations amongst all brewery organizations across the globe. The wide range of products offered by the company made the name more famous. The world's fourth biggest beer manufacturing group has made a new strategy named, SAIL22 and decided new strategy for the organization. The company sells around 140 brands of beer across the globe [12].
5.	Molson-Coors-Brewing	Established in 2003. The company is the growing brewery group with 31 breweries and 90 partner brands across 50 countries of the globe. The company is the second largest organization of beer in U.S, a leading brand in Canada, and a known brand in UK

		and Europe [12].
6.	Tsingtao Brewery Group	The company is the oldest beer/Un-distilled alcohol manufacturing company of China. The company had launched high-end brand image of Chinese beer across the globe. The manufacturing of beer/Un-distilled alcohol started 115 years back. The sales of company increased by 8% in Europe. The company has gained 90% brand recognition in many developed countries of North America and Europe [12].
7.	Asahi	Established in Osaka, the organization named Osaka Beer Company. Asahi-Super-Dry beer has increased the sales of the company and topped the beer sales of Japan for 12 years. The company is more than 128 years old. The company has started business in pharmaceuticals and food manufacturing other than alcohol [12].
8.	Yanjing	The company, Beijing Yanjing Beer Group is basically a China based group. The beer brand is amongst the known beer brands of the globe. The beer/Un-distilled alcohol brand is known for its quality and holds the fourth widely consumed beer brand of China [12].
9.	Kirin	The company is based in Japan, and is one of the largest producers of alcoholic beverages across the globe. The company own some percentage of stake in Asia Pacific Breweries and Myanmar Brewery Limited. The company owns many subsidiaries including Kirin Europe, San Miguel Brewery, Philippine and Kirin Brewery, America [12].
10.	Groupe Castel	The group was established in the year 1949. In last six decades the organization has supplied French wines and beer/Un-distilled alcohol across the globe. The company is a known brand across the globe. The organization has presence in over 130 countries. In 1990, the organization set up a manufacturing unit in Africa and produces majority of products in Africa [12].

The paper puts light on all of the parameters. The benefits of consuming beer include: Removing toxins from the body [13]. The toxins are removed as a result of the diuretic

property of a beer. Increased urination raises the removal of toxins from the body. Longevity increases as a result of delays in aging. A glow appears on the skin because of the presence of Vitamin E in beer, thus showing shine on the hair, growth of nails, the reduced onset of acne, and improving overall physical appearance [14]. After drinking beer, the person gets sound sleep because Nicotinic acid and lactoflavin present in beer make the person feel sleepy [15].

Increases blood levels of vitamin B, and beer's vitamin B6 lowers the risk of heart disease by preventing the body from forming the amino acid homocysteine. Bone density rises as a result of silicon in beer making bones denser and healthier. Additionally, beer lowers the risk of osteoporosis. Beer's magnesium and potassium mineral content reduces the likelihood of kidney stones forming. Beer's 90% water content prevents kidney stones from forming. One bottle of beer a day has been proven to cut the incidence of kidney stones by 40%, according to a study. The risk of occurrence of diabetes reduces, getting affected with diabetes of type-2, the study was conducted at Harvard School [16]–[18]. The damage to mitochondria of the eyes is prevented by antioxidants and enzymes present in beer thus, reduces the danger of developing cataracts. Beer increases the release of dopamine in the brain, thus, protecting against the diseases like Alzheimer's and Parkinson's [19]–[21].

Alcohol abuse has been a major cause of death in many countries. Due to excessive alcohol use, numerous people pass away, get sick, and endure great losses every year. Alcohol abuse is linked to a variety of medical conditions. Rash driving after drinking is frequently associated with traffic accidents, yet alcohol is still the leading cause of accidents. The driver loses consciousness, loses control of the car, and has an accident. Due to its numerous health benefits and high demand, beer is one of the most consumed drinks in the world. Due to the pandemic's effects, a considerable portion of the population now prefers to drink alcohol at home. Thereby greatly expanding the beer industry. In recent months, there has been a considerable increase in demand for beer packaged in pints and cans. As a result of the easy packaging, demand increased [22]–[24].

4. CONCLUSION

The paper highlights the health risks brought on by excessive alcohol intake. The data on deaths brought on by heavy alcohol usage indicate that drinking is one of the riskiest cultural practices that individuals engage in. On the other hand, the health advantages of drinking beer and undistilled alcohol demonstrate that this is one of the best cultural practices practiced by people all over the world. As a consequence of people's changing lifestyles, more socializing, and increased travel, young beer consumption has increased. As a result, there has been an increase in the worldwide beer market. To meet the growing demand the top manufacturers of beer are adopting new techniques manufacturing of beer. The addition of new ingredients, adding salt-based flavor, and addition of tart-based flavor has resulted in raised demand for beer among people.

Due to the rising desire for flavourful beer among young people, the beer market has seen increased demand for craft beer due to its high appeal. The usage of undistilled alcohol and beer has increased dramatically as a result of the health advantages that it offers and the changing lifestyles of people throughout the world. However, excessive use of both distilled and undistilled alcohol has put people's health and their ability to function in society at risk. According to data on deaths and illnesses brought on by excessive alcohol use, those who drink distilled or undistilled alcohol should keep their intake to a minimum. The Mediterranean practice of drinking alcohol with lunch demonstrates unequivocally that people in ancient times were aware of the importance of alcohol use. We learn to restrict our alcohol usage from the Mediterranean culture. The custom was to drink one glass of alcohol

with each meal and abstain from alcohol for the remainder of the day. Even on exceptional occasions like parties or other events, alcohol use was not practiced.

REFERENCES

[1] D. Calina *et al.*, "COVID-19 pandemic and alcohol consumption: Impacts and interconnections," *Toxicology Reports*. 2021. doi: 10.1016/j.toxrep.2021.03.005.

[2] H. F. J. Hendriks and A. Van Tol, "Alcohol," *Handb. Exp. Pharmacol.*, 2005, doi: 10.1007/3-540-27661-0_12.

[3] J. N. Khouja, A. S. Attwood, I. S. Penton-Voak, and M. R. Munafò, "Effects of acute alcohol consumption on emotion recognition in social alcohol drinkers," *J. Psychopharmacol.*, 2019, doi: 10.1177/0269881118822169.

[4] N. K. Morojele, C. Lombard, N. Harker Burnhams, P. Petersen Williams, E. Nel, and C. D. H. Parry, "Alcohol marketing and adolescent alcohol consumption: Results from the international alcohol control study (South Africa)," *South African Med. J.*, 2018, doi: 10.7196/SAMJ.2018.v108i9.12958.

[5] M. Petticrew, N. Maani, L. Pettigrew, H. Rutter, and M. C. Van Schalkwyk, "Dark Nudges and Sludge in Big Alcohol: Behavioral Economics, Cognitive Biases, and Alcohol Industry Corporate Social Responsibility," *Milbank Q.*, 2020, doi: 10.1111/1468-0009.12475.

[6] K. Richter, L. Peter, A. Rodenbeck, H. G. Weess, S. G. Riedel-Heller, and T. Hillemacher, "Shiftwork and Alcohol Consumption: A Systematic Review of the Literature," *European Addiction Research*. 2021. doi: 10.1159/000507573.

[7] K. J. Moriarty, "Alcohol care teams: Where are we now?," *Frontline Gastroenterology*. 2020. doi: 10.1136/flgastro-2019-101241.

[8] National Institute on Alcohol Abuse and Alcoholism, "Alcohol Facts and Statistics," *Natl. Inst. Alcohol Abus. Alcohol.*, 2020.

[9] R. Ramalho, "Alcohol consumption and alcohol-related problems during the COVID-19 pandemic: a narrative review," *Australas. Psychiatry*, 2020, doi: 10.1177/1039856220943024.

[10] S. Tyrovolas *et al.*, "Alcohol drinking and health in ageing: A global scale analysis of older individual data through the harmonised dataset of ATHLOS," *Nutrients*, 2020, doi: 10.3390/nu12061746.

[11] S. W. Lee and S. I. Jang, "Association of alcohol drinking patterns with metabolic syndrome and its components in korean adults: The korea national health and nutrition examination survey 2016–2018," *Int. J. Environ. Res. Public Health*, 2021, doi: 10.3390/ijerph18126433.

[12] R. J. Smith, "10 largest beer companies," *technavio*, 2020.

[13] R. Castro-Muñoz, "Pervaporation-based membrane processes for the production of non-alcoholic beverages," *Journal of Food Science and Technology*. 2019. doi: 10.1007/s13197-019-03751-4.

[14] Y. Luo, L. Kong, R. Xue, W. Wang, and X. Xia, "Bitterness in alcoholic beverages: The profiles of perception, constituents, and contributors," *Trends in Food Science and Technology*. 2020. doi: 10.1016/j.tifs.2019.12.026.

[15] R. P. Biney *et al.*, "Effects of three herb-based alcoholic beverages manufactured in Ghana on sperm characteristics and reproductive hormones in rats," *Sci. African*, 2020, doi: 10.1016/j.sciaf.2020.e00316.

[16] R. Stanton *et al.*, "Depression, anxiety and stress during COVID-19: Associations with changes in physical activity, sleep, tobacco and alcohol use in Australian adults," *Int. J. Environ. Res. Public Health*, 2020, doi: 10.3390/ijerph17114065.

[17] M. E. Bates *et al.*, "Getting to the Heart of Low Sensitivity to Alcohol: Context Moderates Low Cardiovascular Response to Alcohol in Persons With a Family History of Alcohol Use Disorder," *Alcohol. Clin. Exp. Res.*, 2020, doi: 10.1111/acer.14293.

[18] L. Ben El Jilali, B. Benazzouz, A. El Hessni, A. Ouichou, and A. Mesfioui, "Prevalence of alcohol consumption and alcohol use disorders among middle and high school students in the province of Khemisset, Morocco: a cross-sectional study," *Int. J. Adolesc. Youth*, 2020, doi: 10.1080/02673843.2019.1700807.

[19] Y. Jiang, T. Zhang, P. Kusumanchi, S. Han, Z. Yang, and S. Liangpunsakul, "Alcohol metabolizing enzymes, microsomal ethanol oxidizing system, cytochrome P450 2E1, catalase, and aldehyde dehydrogenase in alcohol-associated liver disease," *Biomedicines*. 2020. doi: 10.3390/biomedicines8030050.

[20] E. Hanafi *et al.*, "Alcohol- and Cigarette-Use Related Behaviors During Quarantine and Physical Distancing Amid COVID-19 in Indonesia," *Front. Psychiatry*, 2021, doi: 10.3389/fpsyt.2021.622917.

[21] C. Wiegmann, I. Mick, E. J. Brandl, A. Heinz, and S. Gutwinski, "Alcohol and dementia – What is the link? A systematic review," *Neuropsychiatric Disease and Treatment*. 2020. doi: 10.2147/NDT.S198772.

[22] T. A. Shnitko, Z. Liu, X. Wang, K. A. Grant, and C. D. Kroenke, "Chronic alcohol drinking slows brain development in adolescent and young adult nonhuman primates," *eNeuro*, 2019, doi: 10.1523/ENEURO.0044-19.2019.

[23] I. Oze *et al.*, "Alcohol drinking and esophageal cancer risk: An evaluation based on a systematic review of epidemiologic evidence among the Japanese population," *Japanese Journal of Clinical Oncology*. 2011. doi: 10.1093/jjco/hyr026.

[24] G. Hagger-Johnson *et al.*, "Cigarette smoking and alcohol drinking in a representative sample of English school pupils: Cross-sectional and longitudinal associations," *Prev. Med. (Baltim).*, 2013, doi: 10.1016/j.ypmed.2013.02.004.

CHAPTER 13

EXPLORING THE GENDER INEQUALITY IN EDUCATION SYSTEM AND RESPONSIBLE FACTORS FOR GENDER INEQUALITY

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ABSTRACT: Gender Inequality in education is seen as the main barrier to the general development of the educational system. Gender-based discrimination infringes on the basic human right to gender equality. Therefore, it is crucial to develop policies and initiatives that emphasize giving females equal rights and opportunities, not only in the context of acquiring education but also in the execution of other work responsibilities. In contrast to metropolitan areas, this issue has been more acute in rural areas. The purpose of this study is to examine how gender inequality affects education. The main obstacle to the advancement of the educational system is seen to be the presence of gender disparity in the classroom. Girls require equal participation opportunities, which must be provided by both parents at home and instructors in the classroom. In the future, schools should provide a proper learning atmosphere with resources, infrastructure, and facilities that would promote student enrolment and retention.

KEYWORDS: Class, Education, Females, Girls, Gender Inequality, Learning.

1. INTRODUCTION

When there is discrimination based on sex or gender, one sex or gender is often given greater importance or benefit than the other, everyone call this gender inequity. Gender equality is a fundamental human right that is violated by gender-based discrimination. Gender inequality, which starts in childhood and now restricts a child's potential internationally, has a disproportionately negative influence on girls. Gender equality is at the center of all we do here at Save the Children. Our objective is to establish a society in which men, women, boys, and girls all have the same privileges and possibilities [1], [2]. This is true regardless of gender norms, identities, or expressions in a culture where everyone is valued, revered, and given equal recognition. An ongoing issue in Indian society is gender inequality in education, particularly for girls from economically disadvantaged backgrounds. Education, health, employment, and salary are just a few areas where gender disparities matter. The attainment of universal student enrolment in schools has advanced throughout the last several decades. To overcome gender imbalance in education, regulations and processes have also been implemented [3], [4].

But the contemporary period has also seen educational disparities. Socioeconomic variables, accessibility to learning tools as well as materials, time set aside for formal learning activities, and cultural ideas and attitudes held by people and communities concerning the education of women are the main causes of educational inequalities. It is common in rural areas for people to maintain the opinion that females should stay home and take care of domestic duties rather than attend school [5], [6]. They will ultimately have to get married, and in their new houses, they will have to take care of the domestic duties rather than having any possibilities to apply for their degree. But these views are shifting, and females are now being encouraged to pursue an education, gender inequality in education is shown in Figure 1.

Policies and programs have been created the present to guarantee that girls have access to equal rights and opportunities. In the past, people believed that men in the family should attend college. The men would significantly improve their families' well-being and wealth by finding jobs after they finished their schooling. Thoughts and attitudes have changed in the contemporary world, both urban and rural places, and individuals and organizations are now encouraging girls to seek education as well. Girls and women may both significantly improve their families' and communities' quality of life on an equal basis [7]–[9]. They can only pursue a high-quality education when their parents support them. The literacy rates for children in India are skewed toward one gender. According to the 2011 "Census of India", 82.00 percent of males are literate whereas just 65.00 percent of girls are. According to statistics, there were around 10% more females enrolled in Indian high schools by 2019 than there were in 2011. The discrepancy in genders' access to school was most obvious in India's early literacy rates in 2011. Only 65% of females could read and write, compared to 82% of literate guys. According to statistics, by 2019 there were almost 10% more females attending secondary school in India than there were in 2011.

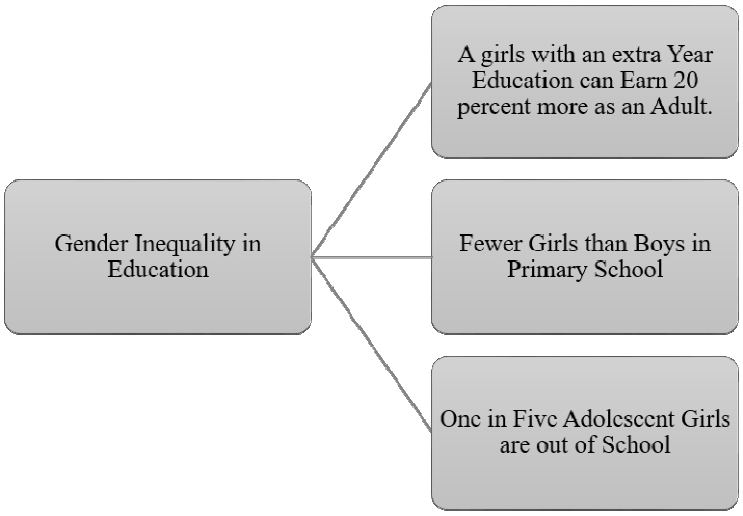

Figure 1: Representing the Facts that are Responsible for Gender Inequality in Education [7]**.**

Even while this represents a substantial improvement, there is still more to be done to guarantee that girls have the same access to high-quality education as boys [10]. Access to high-quality learning tools and materials is crucial for acquiring knowledge and achieving educational goals and objectives. Resources for education are those that make it possible for people to pursue their studies effectively and conveniently. Both households and educational institutions must have a sufficient supply of these. These include effective teaching and learning strategies, teaching and learning resources, technology, books, office supplies, infrastructure, reading materials, and help as well as support from experts and professionals. When financial resources are available, educational institutions may provide all sorts of facilities, equipment, technology, materials, and amenities needed to help the students acquire knowledge and achieve academic goals [11]–[13]. Due to their ample financial means, parents also provide their children with a welcoming and suitable learning environment at home. They make sure that their kids have access to the tools, books, private tutors, and other resources they need to attain the educational goals they set for them. This study investigates the Education System's Gender Inequality and the Causes of Gender Inequality.

2. DISCUSSION

According to the "United Nations Children's Fund," poverty and local cultural traditions are the main causes of the gender gap in education throughout all of India. Another impediment to education is poor sanitation in schools throughout the country.In India, there is still gender inequality. In Indian culture, one must deal with gender discrimination on all levels just by being born a woman. Regardless of their educational background or occupation, women are limited to taking care of the home, raising children, as well as providing for families. Women get paid less for doing the same work at their place of employment and have limited access to job prospects, Gender inequality in education is shown in Figure 2. Poverty, poor school facilities, the dominance of traditional beliefs, the treatment of girls differently, crimes and violent acts, child marriage, parental education, and household management, occupation, a lack of interest in academics, and many other factors are the main causes of gender inequality in education.

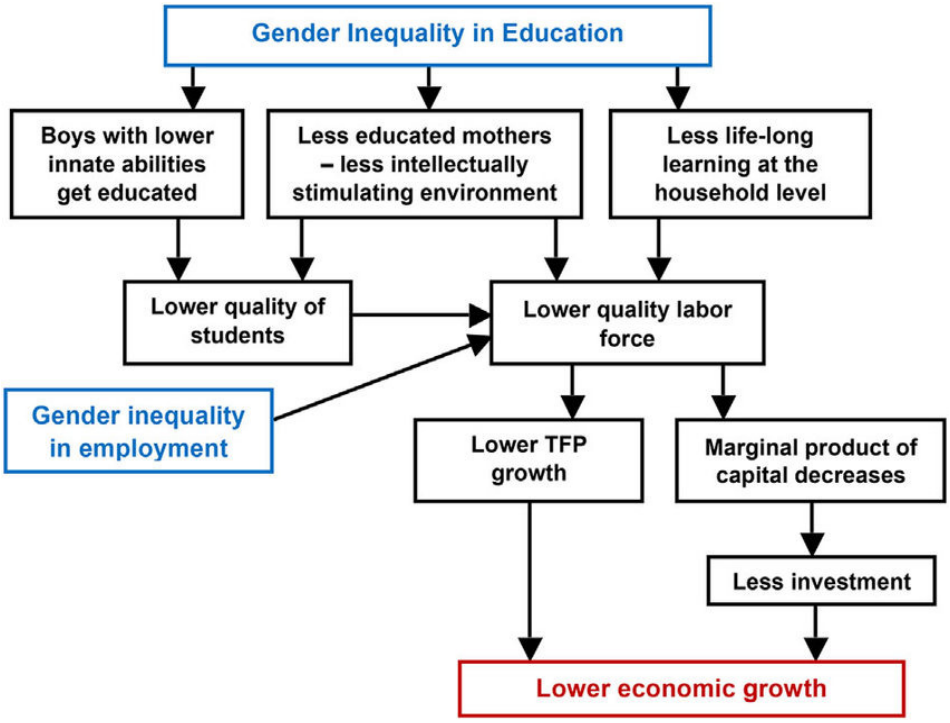

Figure 2: Illustrating the Effects of Gender Imbalance in Education Selection, and the Environment[14].

2.2. Causes of Gender Inequity:

It is challenging to achieve gender justice in India. A female kid has always been viewed as a burden and an encumbrance that parents would wish to avoid. Even before they are born, women face prejudice. These heinous crimes female feticide and infanticide illustrate how cruel the world can be to women. Even though the Indian constitution accords men and women the very same rights and advantages and has equal measures to improve the position of women in society, the majority of women are still unable to make use of the possibilities and privileges that are afforded to them. Some factors that contribute to the gender gap in our culture include traditional value systems, low literacy rates, more home responsibilities, ignorance, bad direction, limited mobility, lack of confidence, and advanced science and technology (Figure 3).

Figure 3: Representing the Major Causes that are Responsible for the Gender Inequity.

2.2.1. Poverty:

In India, 70percent of the 30 percent of individuals who are considered to be in poverty are female. Women's poverty in India is mostly a result of a lack of economic possibilities and autonomy, a lack of financial resources like loans, a lack of inheritance and property ownership, access to social services and education, and a lack of participation by women in decision-making. The economic pie continues to be dominated by males, and women's status is not much better. As a result, gender disparity is a result of our dependency on males for economic survival and the underlying cause of gender discrimination in our patriarchal society.

2.2.2. Lack of literacy:

There are 960 million adult illiterates worldwide, of whom two-thirds are women, despite the world's remarkable efforts to improve basic education. Gender prejudice has its roots in girls' educational underachievement. In 2001, the differences in the literacy rates of men and women became more obvious. From 56 percent in 1981 to over 76 percent in 2001, male literacy rates rose the same increase in female literacy rates from 30% to 54%. Less notable overall is the drop in the gender gap, which peaked in 1981 at 26.6 percent and was 21.7 percent in 2001. Males saw far less interstate heterogeneity in literacy rates than females. At the state level, Kerala has an 88 percent female literacy rate compared to 35% in Bihar.

2.2.3. Absence of Employment Resources:

The pressure between new financial and conventional home-grown obligations can't be settled by ladies. Ladies in India invest a lot of energy in neglected home-grown work, both in provincial and metropolitan regions. Because of the dissemination of undertakings inside the family, ladies will generally have restricted portability and are in this manner less ready to exploit additional opportunities and change professions. A family's freedoms as well as certain limitations are not spread similarly. Male resource proprietorship and the conventional appropriation of work discourage ladies from attempting new things. Furthermore, having youngsters influences a lady's capacity to work. De-Skilling and the discontinuance of long-haul business connections frequently happen as an outcome of time spent on childbearing and childrearing. Because of joblessness, ladies are along these lines unfit to turn out to be financially autonomous, and their dependence on their male partner in such manner adds to orientation disparity.

2.2.4. Social Practices:

Social behaviors, attitudes, and norms still apply to women. The traditional patrilineal joint family structure restricts women's duties to the home, giving them a lower status, level of authority, and power than males. Men are seen as a family's primary defenders and providers, while women are seen as merely providing support and taking care of the home. Accordingly, boys and girls are depleted for various adult responsibilities, prestige, and power. Since very early times, males have controlled women in Indian culture, and both their position and that of the family have been poor. Son preference and disfavor for daughters are complicated phenomena that are still prevalent in many cultures. Sons are seen as economic, political, and ceremonial assets, particularly in business societies, while girls are viewed as liabilities.

Therefore, societal prejudice against women is the primary reason for the gender gap in our society. When a male is born, there is a formal greeting, but when a girl is born, everyone is upset. The desire for male children is brought on by societal ills like dowry, which are common, lower female labor participation rates, and several other factors. Even in this day and age, the conventional orthodox attitude persists, encouraging sex testing and illegal abortion. A girl's kitchen management skills are often prioritized by parents above her education. Many people believe that sending a girl to school would be a waste of money since she would eventually be married off and move in with another family. Parents' traditional views are what causes gender inequality.

2.2.5. Social Affect:

Although many social activists and revolutionaries fought for women's honor and dignity despite all societal barriers, attitude gaps still plague our rural population. The exploitation, superstition, ignorance, and social atrocities committed against women in our culture persist despite significant social growth and technical improvement. Perhaps a significant factor contributing to gender inequality is the societal stigma that women should be confined to the four walls of the home as housekeepers. For the sake of the family's reputation, they shouldn't complain about their money. Men are given a lot of weight in patriarchal societies. Male family members are expected to consume more fresh and nutritious food than female ones in terms of health and nutrition since they are either the breadwinners, the head of the household or are considered to be of higher status than female family members. The issue of gender discrimination is facilitated by this kind of societal attitude.

2.2.6. Lack of Women's Awareness:

Most women are not aware of their basic rights and abilities. Even worse, they don't understand how socioeconomic and political concerns affect them. They tolerate all sorts of discriminatory behavior that are still used in our family and society because of their ignorance and unawareness. No individual may be the target of discrimination solely based on their sex, according to Article 15 of the Indian Constitution. The paradox is that gender discrimination, which is still widespread, is a kind of injustice. So let's abolish gender-based discrimination and raise the banner of gender justice in all of our acts and interactions to set a historical precedent at the beginning of the new century. If women are given equal opportunity to men, they can work in any industry just like men. She is not to blame if she lags behind today, rather, it is the fault of the customs that have long suppressed them. Her thoughts often turn to her family as a consequence, and the environment does not encourage her commitment to an outside job. Social progress, in addition to economic growth, is essential for bringing about change. Women need to be suitably empowered to promote gender equality and effectively overcome gender imbalance (Figure 4).

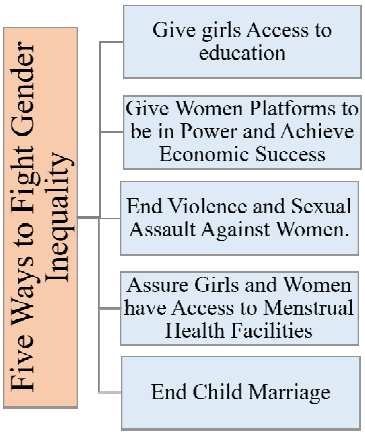

Figure 4: Illustrating the Main Five Methods that Improve the Gender Inequality.

2.3. Methods to Over this Problem:

There are many and various links between "gender equality" and the realization of the fundamental right to education as shown below.

2.3.1. Traditional Viewpoints are Common:

Traditional beliefs on females' education were often held by the people and communities. They held the view that money should be preserved for the daughters' marriages and should not be used for education, especially when they had low financial means. Another argument was that in married houses, females would be largely responsible for taking care of domestic duties rather than being able to use their knowledge. They begin teaching their daughters about carrying out home duties at a young age, taking this element into mind. Girls and women were formerly only restricted to their houses and barred from taking part in any social activities or gatherings. They were prohibited from expressing their opinions in situations involving decision-making. They were expected to follow the norms and judgments made by men since they relied on their wages to support their living circumstances. As a result, they experienced discrimination and were denied access to some possibilities owing to the dominance of conventional perspectives.

2.3.2. Infrastructure in Schools:

The foundation of a suitable and wonderful learning climate and the quest for scholastic targets are viewed as fundamentally impacted by the school framework. The staff members of educational institutions can complete their work responsibilities in an orderly way thanks to the provision of suitable infrastructural facilities. Additionally, the pupils can enjoy themselves in school and become more motivated to learn. According to research, a lack of adequate infrastructure amenities causes students to often leave out before honing their academic talents. For females, in particular, this is true. Furniture, equipment, materials, public amenities, restroom technologies, classrooms, playgrounds, transportation facilities, library facilities labs, and complete school environmental conditions are among the crucial school infrastructure facilities that are essential to improve the learning system.

2.3.3. Discriminatory Behaviour Toward Girls:

According to various research, girls and women often face discrimination in the underprivileged, marginalized, and socioeconomically disadvantaged areas of society. Numerous facets of the treatment of females with discrimination are shown. Education, employment opportunities, empowerment opportunities, the right to own property, the ability to participate in decision-making processes, the ability to express one's opinions, being

discouraged from engaging in social, cultural, economic, and political activities, confinement to one's home, the implementation of household chores, and the responsibility for one's own needs and requirements are some of these. Additionally, they are subjected to prejudice about food, medical services, and even health care facilities. The men members received high-quality meals, whereas the female members received plain cuisine. The persistence of discrimination against women regarding these issues hinders not only their advancement but also the growth of their communities and country.

2.3.4. Occurrence of Violent and Criminal Acts:

Women and girls have endured violent crimes to a significant level both in rural and urban regions. These offenses include child trafficking, domestic violence, sexual assault, rape, acid assaults, female foeticide, female infanticide, physical assault, sexual harassment, and other forms of discrimination. Girls and women who experience these actions suffer effects on both their physical and psychological well-being. The degree to which people have experienced these actions often determines the level of their pain. For instance, females who face verbal harassment from other pupils at school often do not leave. However, if students encounter sexual harassment or any illegal behavior, they may decide to leave school. Therefore, the incidence of illegal and violent activities is considered to be one of the main obstacles to obtaining an education.

2.3.5. Child Marriage:

When a couple marries when they are under the age of 18, it is known as child marriage. Child marriage harms people, especially girls. Young girls who get married are often prevented from pursuing an education, engaging in work prospects, and taking part in other childhood activities. All that is expected of them is that they stay in their houses, carry out domestic duties, and attend to the wants and expectations of other family members. According to research, females often express resistance to obeying their parents, despite this need. Due to the presence of traditional beliefs and attitudes, people and organizations, particularly those from rural areas, marry their daughters off young. They hold the belief that as females become older and more educated, it will become more difficult for them to find appropriate spouses. They even teach their daughters how to execute domestic duties from the beginning for this reason.

2.3.6. Training for Parents

A key element in fostering children's education, instilling moral and ethical values in them, and ensuring their wellbeing is parental education. When parents have a solid education and are employed by reputable companies, it is obvious that they will provide their kids with a high-quality education. Parents who have received enough education will also be aware of the need to guarantee that both boys and girls get equal rights and opportunities. As a result, parents enroll their kids in reputable schools and provide them with an opportunity to improve their professional prospects.

2.3.7. Employment of the Parents:

According to research, encouraging parental employment is a key element in encouraging females' education. Due to the parents' inability to find work, the daughters are prevented from obtaining an education. To maintain their living circumstances sufficiently, work possibilities are the main goal of any person. One may earn money to support their living circumstances by participating in work possibilities. Finding suitable career possibilities is difficult in the current job market. The people must work hard to get recommendations or locate suitable career possibilities. It is believed that one major component in helping children's education acquisition is the parents' jobs and career chances.

3. CONCLUSION

In addition to being a basic human right, gender equality is also essential for a wealthy, stable, and sustainable society. There are more women in political office and other leadership roles, more girls are enrolled in education, fewer are coerced into early marriages, and laws are being changed to foster gender equality. These developments mark progress over the last several decades. The prevalence of gender imbalance in the classroom is seen to be the greatest hindrance to the growth of the educational system. When one or more of these events occur, girls and women often feel both physical and mental effects. Programs and schemes have been developed with the main goal of raising awareness among people from all origins, classifications, and groups to treat girls and women with respect and provide them with equal rights and opportunities. Additionally, initiatives for programs and schemes that support women's education have been launched Girls' effective growth and development, as well as the health of the communities and the whole country, would be facilitated when people and communities accord them equal rights and opportunities. In addition to giving their children support and encouragement, parents must make sure they provide their kids access to educational materials and care for their well-being to help them reach their academic objectives.

REFERENCES

[1] M. Baliamoune-Lutz and M. McGillivray, "The impact of gender inequality in education on income in Africa and the Middle East," *Econ. Model.*, vol. 47, pp. 1–11, 2015, doi: 10.1016/j.econmod.2014.11.031.

[2] C. Buchmann, T. A. DiPrete, and A. McDaniel, "Gender inequalities in education," *Annual Review of Sociology*, vol. 34. pp. 319–337, 2008. doi: 10.1146/annurev.soc.34.040507.134719.

[3] J. A. Jacobs, "Gender inequality and higher education," *Annu. Rev. Sociol.*, vol. 22, pp. 153–185, 1996, doi: 10.1146/annurev.soc.22.1.153.

[4] J. K. Nowak, "Gender Inequality in Education," 2021, pp. 424–433. doi: 10.22364/htqe.2021.31.

[5] J. Zeng, X. Pang, L. Zhang, A. Medina, and S. Rozelle, "Gender inequality in education in China: A meta-regression analysis," *Contemp. Econ. Policy*, vol. 32, no. 2, pp. 474–491, 2014, doi: 10.1111/coep.12006.

[6] O. Victor and M. Ombati, "Gender inequality in education in sub-Saharan Africa," *J. Women's Entrep. Educ.*, vol. 3, no. 4, pp. 114–136, 2012.

[7] C. RIEGLE-CRUMB, "Gender Inequality in Education:," in *Education and Society*, 2019, pp. 41–53. doi: 10.2307/j.ctvpb3wn0.7.

[8] D. K. K. Gopinath S, "Gender Inequality In Education In India," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 7 SE-Articles, pp. 3983–3988, 2020, [Online]. Available: http://sersc.org/journals/index.php/IJAST/article/view/23164

[9] S. Klasen, "Low schooling for girls, slower growth for all? cross-country evidence on the effect of gender inequality in education on economic development," *World Bank Econ. Rev.*, vol. 16, no. 3, pp. 345–373, 2002, doi: 10.1093/wber/lhf004.

[10] U. Daraz, A. Ahmad, and M. Bilal, "Gender Inequality in Education: An Analysis of Socio-Cultural Factors and Impacts on the Economic Development of Malakand, Pakistan," *Lib. Arts Soc. Sci. Int. J.*, vol. 2, no. 2, pp. 50–58, 2018, doi: 10.47264/idea.lassij/2.2.6.

[11] Z. Shayan, "Gender Inequality in Education in Afghanistan: Access and Barriers," *Open J. Philos.*, vol. 05, no. 05, pp. 277–284, 2015, doi: 10.4236/ojpp.2015.55035.

[12] A. Grow and J. Van Bavel, "Assortative Mating and the Reversal of Gender Inequality in Education in Europe: An Agent-Based Model," *PLoS One*, vol. 10, no. 6, p. e0127806, Jun. 2015, doi: 10.1371/journal.pone.0127806.

[13] I. G. Yumusak, M. Bilen, and H. Ates, "The Impacts of Gender Inequality in Education on Economic Growth in Turkey," *Procedia - Soc. Behav. Sci.*, vol. 103, pp. 1093–1103, Nov. 2013, doi: 10.1016/j.sbspro.2013.10.437.

[14] researchgate, "Gender inequality in education-selection-distortion and environment effects", [Online]. Available: https://www.researchgate.net/figure/Gender-inequality-in-education-selection-distortion-and-environment-effects_fig1_304004393

CHAPTER 14
AN INVESTIGATIVE SURVEY ON THE IMPACT OF ONLINE CLASSES ON TRADITIONAL EDUCATION SYSTEM

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ABSTRACT: ***In an online class, a trainer teaches students a skill using live or recorded lectures over an online session. In essence, online training sessions are skill-learning classes given by a trainer the author explained how the curriculum created by educational authorities for in-person lectures is difficult to study online because of the absence of contact. The author used a technique in which they carried out a survey that emphasizes the many learning characteristics and the views of pupils of various age groups on what they need in online learning sessions. The findings demonstrate that information is acquired to examine the students' perceptions of the variations between lectures conducted offline and online. The author draws the conclusion that students preparing for competitive tests felt a need for more interactive academic learning sessions throughout the academic phase of studying and passing the competitive exam. The present research creates new opportunities for the future and draws the attention of educational authorities to the need for education and the required adjustments to the existing educational system.***

KEYWORDS: ***Academic, Classes, Lectures, Online Learning,Pandemic.***

1. INTRODUCTION

Online education learning refers to any ability that is acquired via a live video session. The instructor shows the skill to the learner while they are at home via a live video stream, and the learner takes it up while unwinding in their comfortable surroundings. The time of the learning session is determined by the trainer's and learners' schedules [1]–[3]. People gain a wide range of skills through online learning. Nowadays, a lot of individuals choose online learning since it reduces travel time for both learners and instructors [4], [5]. Depending on the availability, the session's beginning time may be adjusted. So, instead of traveling, the person spends that time learning new skills or doing other productive things. Learning any instrument, any dance style, any sort of art, any kind of craft, any kind of cuisine, and many other things is possible via online and electronic learning alternatives [6]–[8].

Online classes for high school and college students have become prevalent as a result of the pandemic since social isolation is the only option. To grasp the curriculum, which was intended to be taught over a full year via classroom lectures held both offline and now online, appears to be quite difficult. Since sitting still and staring at a computer continually for six to eight hours could be difficult for students in high school and college. To help students improve their abilities, educational institutions have chosen to reduce lectures and provide homework that they must finish independently [9]–[11]. Table 1 lists the various online learning portals along with the courses they offer. There are numerous online electronic learning platforms where students can enroll in online courses, including:

Table 1: Illustrates the various electronic learning portals and the courses offered by the portals.

S. No.	Online Portal	Courses offered
1.	Khan Learning Academy	Provides various courses to learn in various languages including French, Japanese, German,

		English, and Italian. The course includes learning exercises also.
2.	Alison Online	Provides various language courses like English, German, Arabic, French, and Spanish. Other courses include health-related, technology-related, and business courses.
3.	Skill Share online platform	Provides learning on various subjects like data science, analytics, graphic design, and e-commerce [12]–[14].
4.	Edx Online	Provides a free course at the university level in various subjects like data science, computer science, various engineering streams, and languages also. The video lectures are similar to classroom lectures and include discussion groups also [15]–[17].
5.	Udacity teaching platform	Provide learning experience via instructions by experts on subjects like design, business, marketing, and many more other subjects.
6.	Coursera free learning site	Provides master's and a specialization degree in various streams via previously recorded lectures. The learner can see the lectures according to his availability.
7.	Udemy online platform	Offers courses related to design, sales and marketing, and business. The learner is provided with a huge library of various courses. A learner can learn courses using a variety of devices connected to the internet [18].

In this paper, the author elaborates that when surveyed by survey volunteers over the phone, a similar trend to that of the online mode of interaction was observed, in which the same number of students said they are not happy with no sports activity during the online mode of School and a similar number said they are happy with no sports activity during the online mode of School [19]–[21]. An equal trend was observed in which an equal number of students said they are not happy with no cultural activity during the online mode of School

while the rest of students said they are happy with no cultural activity during the online mode of School when asked by survey volunteers on a telephone call.

2. LITERATURE REVIEW

Adedoyin et al. in their study embellish that to determine the pattern of students enrolling for the online courses that are conducted in summer. The author applied a methodology in which they stated that students enrolled for the online undergraduate course were similar to the pattern that was followed by students who were enrolling for a regular yearly undergraduate course. The result shows a greater number of female candidates registered for the online course and those students residing in remote locations applied for the online mode of course. The author concludes that online study is effective for some people only whose urges to study effectively [22]. Xinran Zhu et al. in their study illustrates that during times of pandemic, online interaction for academic as well as official purpose has been frequently used. Xinran Zhu et al. applied a methodology in which they conducted that by using web-based technology more precise and advanced knowledge can be provided to students during online lectures. The results show assessing the learner, and connecting with online portals of teaching can support the educator in providing a quality lecture to the student. The author concludes that students of all ages are receiving their academic education via online programs while the pandemic is occurring [23].

Mukhtar et al. in their study embellish that most of the students studying in the last semester of their college education prefer to turn off their video cameras, the reason observed is that because of different demographic backgrounds and lack of confidence to interact with the teacher and fellow batch-mates via video during online learning encouraged them to keep their video turned off. The author applied a methodology in which they conducted that Students of all ages are receiving their academic education exclusively through online programs during this pandemic. The results show a survey was undertaken to evaluate the efficiency of online courses and electronic learning, as well as how they affected students. The author concludes that effective learning is useful for college student and also for workers [24].In this research, the author elaborates on the procedure that students who enrolled in a standard annual undergraduate course followed. The outcome reveals that more female applicants have signed up for the online course than male candidates, and students who live in rural areas have applied for the online form of instruction. The author draws the following conclusion only some persons, whose impulses to study successfully, may benefit from online learning.

Research Questions:

- How are online learning affecting students?
- How learning is playing a major role in the pandemic?
- How the academic education with online classes affect society?

3. METHODOLOGY

3.1.Design:

In this paper, the author applied a methodology in which they conducted survey-based research. During this pandemic, all students, regardless of age, are obtaining their academic education only via online programmes. To assess the effectiveness of online education and its impact on students, a survey was conducted. Students from various high schools and colleges participated in the research over the phone. The pupils' contact information was provided by the school and institution. The college administration granted the required permission for the survey to be conducted and for the collection of the student's contact information. The

concerned college or school administration dispersed student contact information at random. The contact details of several high school and college students were acquired from the city of Mumbai.

3.2.Sample And Instrument:

In this research different types of samples are used several fifth to eighth graders, eighth to twelve graders, students preparing for competitive examinations, college graduates, and post-graduate college students were asked about their experiences with online classrooms and electronic learning in terms of academic learning during a phone interview. Only digital mode contact during lecture sessions and no human involvement, as in earlier classroom lectures, are considered interaction sessions. Practical courses need offline laboratory sessions No outside activities, etc. Cultural events, i.e., occasions like yearly school functions, stage performances, college festivals, and competitions of various artistic mediums, illustrate how individuals engage in these activities in the offline mode.

3.3.Data Collection:

In this paper, the data is collected from different sources ten students in the fifth through eighth grades were called by survey volunteers who gave them information about the survey and their phone numbers. The poll respondents also said that after making a specific request to their institution or school, the appropriate staff members provided the students' contact information. When survey volunteers called all of the students to inquire about their experiences with academic learning when lectures were delivered online or through electronic learning, a nearly consistent trend was noticed in which a greater number of students expressed dissatisfaction with the online mode of academic learning and a smaller number of students expressed satisfaction. When surveyed over the phone by survey volunteers, a greater proportion of students expressed dissatisfaction with the online style of learning or engagement while acquiring skills, while a considerably smaller proportion expressed satisfaction.

3.4.Data Analysis:

All the data is collected and analyzed in such a manner chance of error becomes Nearly all students reported they are dissatisfied with the absence of practical lessons, also known as classroom/offline laboratory sessions, as a component of studying academics when questioned by survey volunteers over the phone. However, just one student said that he is OK with the absence of practical lessons, commonly referred to as classroom/offline laboratory sessions, as a component of academic learning. When asked by survey volunteers whether they were happy or unhappy with the absence of athletic activities during online school or electronic learning, every student responded that they were not happy with it. However, no student said that he was happy about it. When surveyed by survey volunteers over the phone, a larger percentage of students expressed dissatisfaction with the lack of cultural activities during the online form of electronic learning, whereas a far smaller percentage of students expressed satisfaction. Figure 1 describes the opinion of students as they like or do not like learning various skills via online learning**.**

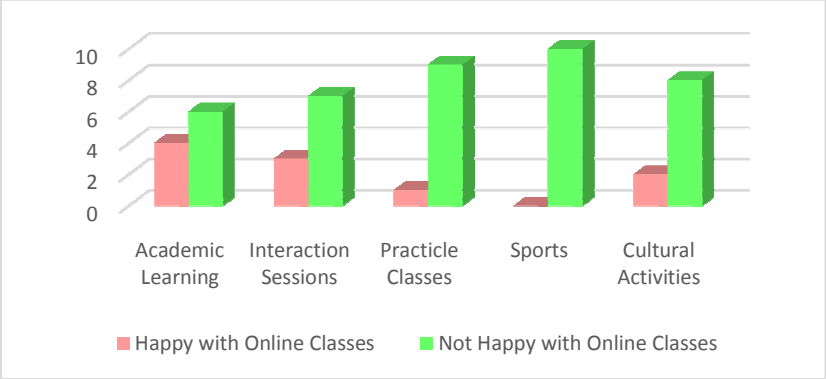

Figure 1: Illustrates the opinion of students of 5th to 8th standard as they like or do not like learning various skills via online mode.

The survey volunteers phoned a total of 10 students in grades 9 through 12 and told them about the survey over the phone. Volunteers for the survey also said that after making a particular request to their school or college, the concerned officials gave the contact information for the kids. When asked by survey volunteers on the phone about their experiences with online lectures and electronic learning, a very small percentage of students said they were pleased with the online mode of academic learning. All students were called and asked about their experiences with academic learning when lectures were conducted in this manner. When queried by survey volunteers over the phone, a larger percentage of students indicated they are not satisfied with the online style of interaction while learning skills, while a far smaller percentage of students said they are happy with the online mode of interaction while learning skills. When questioned by survey volunteers over the phone, almost all students stated that they are unhappy with the lack of Practical Classes, or classroom/offline laboratory classes, as a part of learning academics. Only one student stated that he is happy with the lack of Practical Classes, or classroom/offline laboratory classes, as a part of learning academics. Figure 2 illustrates the proportion of students who like or dislike acquiring certain skills online.

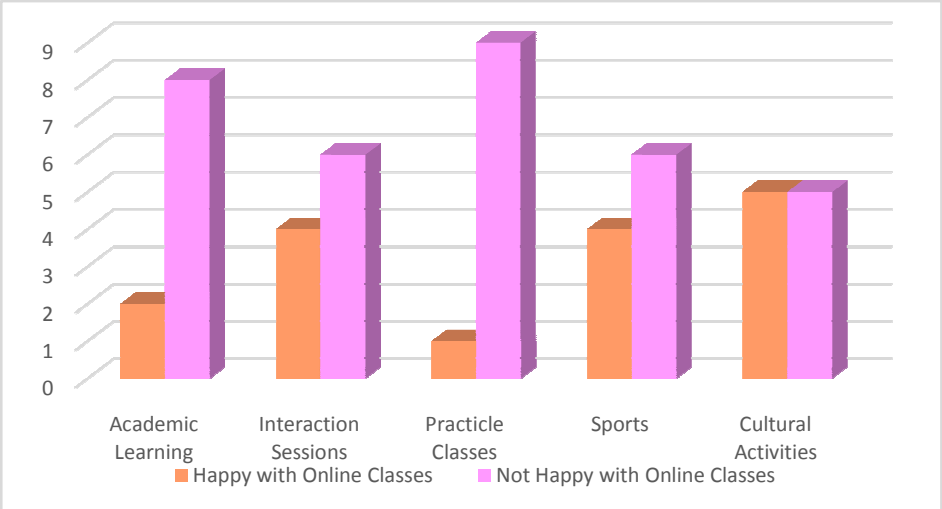

Figure 2: Embellishes the number of students of 9th to 12th standard who like or do not like learning various skills via online mode.

The survey volunteers phoned 10 students who were studying for competitive examinations and briefed them about the survey on their contact numbers. Volunteers for the survey also said that after making a particular request to their school or college, the concerned officials

gave the contact information for the kids. When asked by survey volunteers on the phone, the majority of students said they were dissatisfied with the online mode of academic learning, while only one student said he was satisfied with online lectures. All students were called and asked about their experience of academic learning when lectures were conducted in this manner. When queried by survey volunteers over the phone, a larger percentage of students indicated they are not satisfied with the online style of interaction while learning skills, while a far smaller percentage of students said they are happy with the online mode of interaction while learning skills.

When questioned by survey volunteers over the phone, no student stated that he is satisfied with the lack of Practical Classes, i.e., lack of classroom/offline laboratory classes as a part of learning academics, and no student stated that he is not satisfied with the lack of Practical Classes, i.e., lack of classroom/offline laboratory classes as a part of learning academics. When questioned by survey volunteers over the phone, no student said that he is unhappy about there being no sports activity during the online form of school, and no student stated that he is glad about there being no sports activity during the online mode of school. When questioned by survey volunteers over the phone, no student said that he is unhappy about the lack of cultural activities during the online mode of school, and no student stated that he is glad about the lack of cultural activities during the online form of school. The percentage of students who like or dislike acquiring certain skills online is shown in Figure 3.

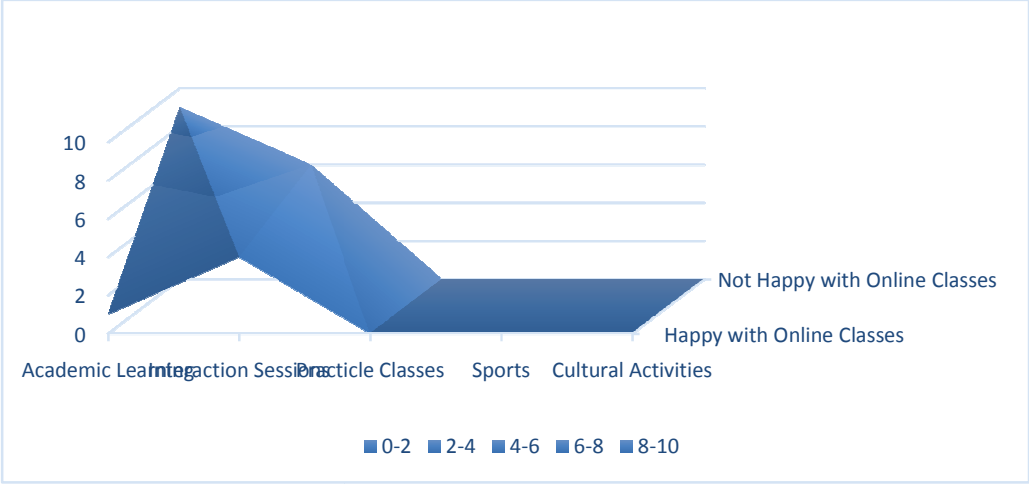

Figure 3: Illustrates the number of students who like or do not like competitively learning various skills via online mode.

The survey volunteers phoned a total of 10 college-graduating students and told them about the survey over the phone. Volunteers for the survey also said that after making a particular request to their school or college, the concerned officials gave the contact information for the kids. When lectures were delivered in an online format, all students were contacted and asked about their experiences with academic learning. On average, students reported being dissatisfied with online academic learning, whereas just one student responded positively to online lectures when survey volunteers contacted him on the phone. When surveyed by survey volunteers over the phone, a similar number of students said they are not satisfied with the online mode of interaction while learning skills and a similar number of students said they are satisfied with the online mode of interaction while learning skills, demonstrating a trend that is similar to that of academic learning.

When surveyed by survey volunteers over the phone, a greater percentage of students said they are not happy with the lack of Practical Classes, i.e., lack of classroom/offline laboratory

classes as a part of learning academics, while a much smaller percentage said they are happy with the lack of Practical Classes, i.e., lack of classroom/offline laboratory classes as a part of learning academics. All students expressed dissatisfaction with the lack of athletic activities during online learning, according to a pattern that was noticed, but no student expressed satisfaction with the same during a telephone interview with survey volunteers. When asked by survey volunteers on the phone, no student responded that he is happy with no cultural activity during the online mode of learning, continuing a similar trend to that of sports activity. However, all students said they are not happy with no cultural activity during the online mode of learning. The percentage of students who like or dislike acquiring certain skills online is shown in Figure 4.

The survey volunteers phoned 10 post-graduate students and told them about the survey over the phone using their contact information. Volunteers for the survey also said that after making a particular request to their school or college, the concerned officials gave the contact information for the kids. When all students were contacted and questioned about their experiences with academic learning when lectures were delivered online, a sizable portion of them expressed dissatisfaction with the online style of academic learning while a very small portion of them expressed satisfaction with online lectures. When surveyed by survey volunteers over the phone, more students said that they are not satisfied with the online style of interaction while learning skills, while a very small number of students stated that they are satisfied with the online form of interaction while learning skills.

Figure 4: Illustrates the number of Graduation students who like or do not like learning various skills via online mode

A similar pattern to that of interaction was observed, and a similar number of students expressed dissatisfaction with the absence of practical classes or offline laboratory classes, as a component of academic learning, while a similar number of students expressed satisfaction with the absence of Practical Classes, or offline laboratory classes when questioned by survey volunteers over the phone. When surveyed by survey volunteers over the phone, a larger percentage of students claimed they were unhappy that there was no opportunity for sports during the online method of learning, while a far smaller percentage said they were pleased. When questioned by survey volunteers over the phone, all students said that they are not satisfied with the lack of cultural activities during the online mode of learning, while no student stated that he is satisfied with the lack of cultural activities during the online mode of learning. The percentage of students who like or dislike acquiring certain skills online is shown in Figure 5.

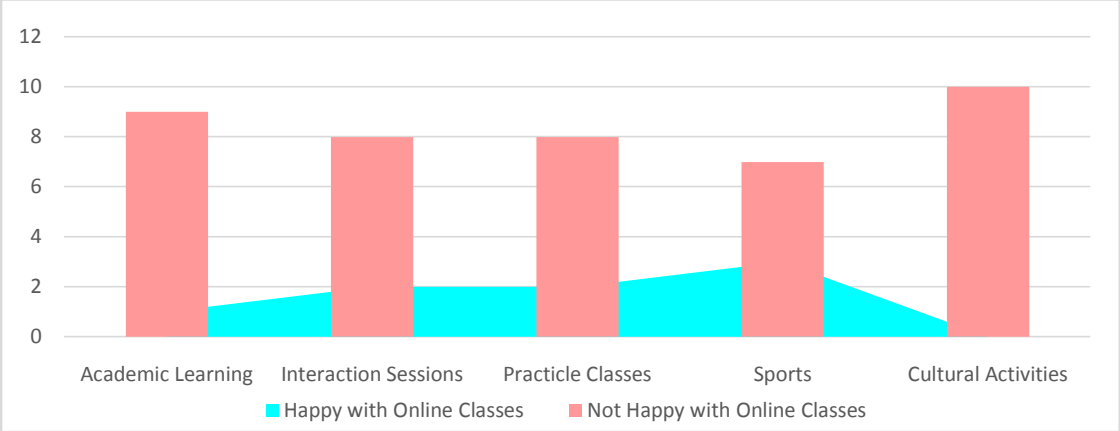

Figure 5: Embellishes the number of post-Graduation students who like or do not like learning various skills via online mode.

After talking to several applicants, data was gathered, and it was found that different age groups of students required differing amounts of interactive academic learning sessions, practical laboratory lessons, sports competitions, and cultural activities. The need varied depending on the age group and the focus of the individual. For instance, students taking competitive exams did not need practical laboratory classes, sports, or cultural activities because they were solely focused on their exams, whereas college students valued all activities highly.

4. RESULTS AND DISCUSSION

A survey was done to ascertain the success of online courses. Students from schools and colleges in Mumbai, Maharashtra were asked to provide their personal contact information for the survey. Poll participants visited the school or institution to gather contact information and obtained the proper authorization from administrators to conduct the survey and contact their students. The survey entailed contacting kids in the fifth through eighth grades, the eighth through the twelfth grades, students who were taking competitive exams, students seeking graduation from college, and students pursuing post-graduation from college. When it came to academic learning, students were questioned about their experiences with online classrooms, no human engagement, as in older offline lectures, and only digital mode interaction during lectures are considered interaction sessions. Lack of offline practical laboratory sessions in practical classes sports, i.e., any indoor sport, Cultural activities, or the absence of cultural events such as school functions, plays, college festivals, amusement fairs, and contests in many art forms, reflects how people feel about doing such activities offline. The total number of students who were satisfied or dissatisfied with the online form of learning is shown in Table 2.

Table 2: Gives an idea of the total number of students who were happy/not happy with the online mode of learning

Learning Types	**Total number of Students who were Not-Happy with the Online Mode of learning**	**Total number of Students who were Happy with the Online Mode of learning**
Academic Learning	41	9

Interaction Session	36	14
Practical Classes	34	16
Sports Events	33	17
Cultural Activities	33	17

Out of a total of 50 students of various ages, the results show that a greater proportion of students were dissatisfied with the online mode of academic learning and the dearth of interactive sessions. When this was discussed over the phone with survey participants, the reason given was the lack of one-on-one time with the teacher while learning a new subject of study. A similar pattern was seen in the absence of practical laboratory sessions during online academic learning, sporting events during online academic learning, and cultural activities during online academic learning among the total number of students from various age groups. A similar pattern was observed, and a similar number of students expressed dissatisfaction with the absence of practical laboratory sessions, sporting events, and cultural activities during the online mode of academic learning as well as satisfaction with the absence of these activities.

The average of students across all age groups revealed a similar pattern, with students in grades 5 through 12 complaining about the absence of practical classes and extracurricular activities. Students who were prepared for competitive tests, however, were content to skip the sporting event, the cultural event, and the practical instruction since they were more interested in their theoretical studies and exam preparation. The absence of interaction sessions during academic learning, practical sessions, sporting activities, and cultural events dissatisfied graduates and post-graduation college students. Since college students' syllabuses vary depending on their field of study, they must attend the appropriate learning sessions to acquire new material. Additionally, personality development—which is acquired through numerous cultural activities, sporting events, and other events held as part of the course—is necessary to join the employment market. Accordingly, depending on their needs, some students were OK with having no interactive sessions, while others were not.

5. CONCLUSION

Students' opinions of the impact of online lectures on academic learning, interaction sessions during academic learning, the absence of practical laboratory classes during academic learning, the absence of sporting events or other extracurricular activities during online learning sessions, and the lack of cultural activities that take place every year in every educational institution were all investigated through a survey. The online method of education was deemed inadequate by fifth through eighth-grade students, who also felt that there should be more interactive academic sessions. More so than students in grades 5 through 8, kids in grades 9 through 12 expressed this need for engaging academic sessions. All pupils in grades 5 through 8 and 9 through 12 observed the absence of practical laboratory sessions. However, students in grades 5 through 8 and 9 through 12 did not notice the loss of sports events and cultural activities as much since they were more focused on the academic aspect of learning.

Students preparing for competitive exams did not care that there were no practical laboratory sessions, no cultural activities, and no athletic events since they were more focused on the

academic component of studying and passing the exam. The future potential of this paper is that college students had similar concerns about the absence of interactive learning sessions, lack of practical laboratory sessions, and absence of sports and cultural activities since they were focusing on overall learning and not just academic learning. The present study, therefore, creates the possibility for further chances to alert the authorities to the need to improve the educational system.

REFERENCES

[1] I. Kingsbury, "Online learning: How do brick and mortar schools stack up to virtual schools?," *Educ. Inf. Technol.*, 2021, doi: 10.1007/s10639-021-10450-1.

[2] F. Dağ and A. Geçer, "Relations between online learning and learning styles," *Procedia - Soc. Behav. Sci.*, 2009, doi: 10.1016/j.sbspro.2009.01.155.

[3] Y. M. Tang *et al.*, "Comparative analysis of Student's live online learning readiness during the coronavirus (COVID-19) pandemic in the higher education sector," *Comput. Educ.*, 2021, doi: 10.1016/j.compedu.2021.104211.

[4] G. M. Rafique, K. Mahmood, N. F. Warraich, and S. U. Rehman, "Readiness for Online Learning during COVID-19 pandemic: A survey of Pakistani LIS students," *J. Acad. Librariansh.*, 2021, doi: 10.1016/j.acalib.2021.102346.

[5] Y. Zhu, J. H. Zhang, W. Au, and G. Yates, "University students' online learning attitudes and continuous intention to undertake online courses: a self-regulated learning perspective," *Educ. Technol. Res. Dev.*, 2020, doi: 10.1007/s11423-020-09753-w.

[6] H. Yanto, R. Hidayah, A. Hajawiyah, N. Baroroh, and A. Wibowo, "Developing operational accounting competencies during the pandemic using emergency online learning," *Cogent Educ.*, 2021, doi: 10.1080/2331186X.2021.1926405.

[7] D. T. H. Van and H. H. Q. Thi, "Student Barriers to Prospects of Online Learning in Vietnam in the Context of Covid-19 Pandemic," *Turkish Online J. Distance Educ.*, 2021, doi: 10.17718/tojde.961824.

[8] T. Binali, C. C. Tsai, and H. Y. Chang, "University students' profiles of online learning and their relation to online metacognitive regulation and internet-specific epistemic justification," *Comput. Educ.*, 2021, doi: 10.1016/j.compedu.2021.104315.

[9] J. Viana and H. Peralta, "Online Learning: From the Curriculum for All to the Curriculum for Each Individual," *J. New Approaches Educ. Res.*, 2021, doi: 10.7821/NAER.2021.1.579.

[10] C. Carrillo and M. A. Flores, "COVID-19 and teacher education: a literature review of online teaching and learning practices," *Eur. J. Teach. Educ.*, 2020, doi: 10.1080/02619768.2020.1821184.

[11] G. El-Sayad, N. H. Md Saad, and R. Thurasamy, "How higher education students in Egypt perceived online learning engagement and satisfaction during the COVID-19 pandemic," *J. Comput. Educ.*, 2021, doi: 10.1007/s40692-021-00191-y.

[12] K. Veryaeva and O. Solovyeva, "The influence of gamification and platform affordances on user engagement in online learning," *Int. J. Distance Educ. Technol.*, 2021, doi: 10.4018/IJDET.2021010101.

[13] A. O. Asare, R. Yap, N. Truong, and E. O. Sarpong, "The pandemic semesters: Examining public opinion regarding online learning amidst COVID-19," *J. Comput. Assist. Learn.*, 2021, doi: 10.1111/jcal.12574.

[14] P. Timonen and H. Ruokamo, "Designing a Preliminary Model of Coaching Pedagogy for Synchronous Collaborative Online Learning," *Journal of Pacific Rim Psychology*. 2021. doi: 10.1177/1834490921991430.

[15] N. Annamalai, "Online learning during COVID-19 Pandemic. Are Malaysian high school students ready?," *Pertanika Journal of Social Sciences and Humanities*. 2021. doi: 10.47836/pjssh.29.3.06.

[16] H. Heo, C. J. Bonk, and M. Y. Doo, "Enhancing learning engagement during COVID-19 pandemic: Self-efficacy in time management, technology use, and online learning environments," *J. Comput. Assist. Learn.*, 2021, doi: 10.1111/jcal.12603.

[17] E. Chung, G. Subramaniam, and L. C. Dass, "ERIC - EJ1267359 - Online Learning Readiness among University Students in Malaysia amidst COVID-19, Asian Journal of University Education, 2020-Jul," *Asian J. Univ. Educ.*, 2020.

[18] S. L. Chan, C. C. Lin, P. H. Chau, N. Takemura, and J. T. C. Fung, "Evaluating online learning engagement of nursing students," *Nurse Educ. Today*, 2021, doi: 10.1016/j.nedt.2021.104985.

[19] A. Althagafi, G. Althobaiti, H. Alhakami, and T. Alsubait, "Arabic Tweets Sentiment Analysis about Online Learning during COVID-19 in Saudi Arabia," *Int. J. Adv. Comput. Sci. Appl.*, 2021, doi: 10.14569/IJACSA.2021.0120373.

[20] J. R. N. Lim, S. Rosenthal, Y. J. M. Sim, Z. Y. Lim, and K. R. Oh, "Making online learning more satisfying: the

effects of online-learning self-efficacy, social presence and content structure," *Technol. Pedagog. Educ.*, 2021, doi: 10.1080/1475939X.2021.1934102.

[21] J. W. Richardson, J. E. M. Lingat, E. Hollis, R. College, and M. Pritchard, "Shifting teaching and learning in online learning spaces: An investigation of a faculty online teaching and learning initiative," *Online Learn. J.*, 2020, doi: 10.24059/olj.v24i1.1629.

[22] O. B. Adedoyin and E. Soykan, "Covid-19 pandemic and online learning: the challenges and opportunities," *Interactive Learning Environments*. 2020. doi: 10.1080/10494820.2020.1813180.

[23] X. Zhu, B. Chen, R. M. Avadhanam, H. Shui, and R. Z. Zhang, "Reading and connecting: using social annotation in online classes," *Inf. Learn. Sci.*, vol. 121, no. 5–6, pp. 261–271, 2020, doi: 10.1108/ILS-04-2020-0117.

[24] K. Mukhtar, K. Javed, M. Arooj, and A. Sethi, "Advantages, limitations and recommendations for online learning during covid-19 pandemic era," *Pakistan J. Med. Sci.*, 2020, doi: 10.12669/pjms.36.COVID19-S4.2785.

CHAPTER 15
AN ANALYSIS OF THE PROFESSIONAL EFFECTIVENESS OF A MUSICIAN THROUGH YOUTUBE PROMOTION

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ABSTRACT:With the development of technology, more artists are being inspired to seek careers in the music business. Along with having the potential in the artist, it is necessary to market these skills strategically. In this paper, the author discussed that Today, youngsters and seniors are focused on honing their talents. It has been shown that promoting an artist's skill gradually using a digital marketing platform before spending money on their debut produces better outcomes. In this paper, the author applied a methodology in which a survey is conducted the current survey reveals that YouTube functions as a possible medium for promoting talent and leads to a rise in the number of admirers of a new artist. The results show since it is also seen that YouTube plays a key role when used as a method of digital marketing. The author concludes that YouTube was evaluated as a very effective digital advertising platform for social media. Thus providing a foundation for future research on the relationship between various social media platforms and marketing tactics.

KEYWORDS: Artist, Digital Marketing, Promotion, Video, YouTube.

1. INTRODUCTION

All inputs that make use of the internet or a device are considered to be part of digital advertising or marketing. To engage with actual, interested consumers, businesses employ streaming services like search terms, media platforms, email, and other websites. A skilled inbound marketer may describe brand awareness and internet advertising as being that thing, despite some key differences [1].

1.1.Significance Of Digital Marketing:

Digital advertising can take place electronically and online, as opposed to conventional marketing, which may involve printed ads, phone calls, or physical marketing. This demonstrates that there are several additional opportunities for companies to engage with consumers through the use of mail, videos, social media, and search engine capabilities. If they don't, they either use digital advertising or are active via social media. Nowadays, people mistakenly assume and depend on computers and communication to acquire about firms [2], [3]. As a result, if the author wants to stay competitive as a business owner, they must incorporate certain aspects of digital marketing. Due to the variety of options and plans that come with digital marketing, you may be on a budget, be creative and try out new marketing techniques. Furthermore, you may track the return-on-investment ROI of your advertisements more efficiently with internet advertising than you'll get from conventional promotional data, like billboards or print ads, by using tools like analytical dashboards.

1.2.Digital Marketing (DM) In Business:

To interact with customers, who spend the majority of their time online, DM uses a variety of electronic methods and formats. Here are a few strategies that fall under the category of "digital marketing," which range from websites to the promotion of certain thing. The most effective digital marketers clearly explain how each digital advertising campaign advances its main objectives. Additionally, depending Marketers may use the they have both free and subsidized transit options. to assist a larger campaign depending on the goals of their promotional plan [4]–[6].

That contrast, an information merchant may create a number of blog posts to attract interest in a recently released e-book. The corporation's social media advertisement may then support and promote such blog posts through compensated and unsponsored broadcasts on the corporation's social networks. For each person who downloads the brochure, the mail operator will develop a processes that deliver to give information and is interested in learning more about the company [7].

1.3.Types Of Digital Marketing:

1.3.1 Search Engine Optimization (SEO):

Increasing the volume and regularity of visitors to search engine websites is the goal of SEOs. The goal of "search engine optimization (SEO) is to increase organic traffic rather than paid or direct traffic "("natural" or "organic" outcomes). Unpaid traffic can be generated via a range of searches, including image, video, academic, news, and horizontal online services tailored to a particular industry.

As an online marketing approach, SEO bases its decisions on information consumers look for, how search engine's function, the technologies that control them, and which searches are favoured by their target audiences. SEO is familiar with how internet companies work. When a website receives increased search engine traffic due to its placement in the results list, SEO has been successful. These vacationers may become clients [8].

Outbound SEO When trying to optimise your website, this kind of SEO focuses on all activities that happen "on the page." What steps have been performed that may have a negative impact on my website's ranking? You may do so. The answer is backlinks, often known as inbound links. How highly you search for both the key keywords you want depends on the quantity of sources linked to you and the associated "authority" of these publishers. collaborating with other media, submitting guest posts to webpages relating to your industry, and connecting to them again), and garnering attention from the outside are all ways to get the backlinks you need to change the ranking of your website[9].

1.3.2 Inbound Marketing:

The mechanism that enables potential consumers to find their company depends on the marketing strategy. Even though this is typically done before the buyer is prepared to buy, early purchase intention can generate leads and sales. Inbound marketing employs a variety of pull business strategies, including the comes with multiple, websites, seminars, search engine optimization (SEO), media platforms, and more. Retargeting remarketing depends on exposure as opposed to outbound marketing, which looks for customers. Inbound marketing companies use a novel strategy for lead generation, relationship expansion, and awareness-raising rather than "renting attention [10]–[12].

Customers find these strategies appealing, and they stop feeling like they are being marketed to. Consumer-friendly, instructive, and entertaining content is used in inbound marketing. Instead of embracing them openly, effective inbound marketing may provide substantially better returns than conventional marketing. This will have an impact on the choices your customers make and how they perceive your business generally. As clients discover your business in this manner. The nicest part about inbound marketing is that it only uses completely natural leads, emphasizing brains rather than dollars.

Inbound marketing has the power to put customers in charge and connect the people who are eager to hear the information you have to offer. Inbound marketing is effective. Wonders for lead conversions and customer retention, as well as social media shares, brand awareness, and SEO operations. A strong inbound marketing platform encourages customers to stay in touch

with the business at all times. This enables you to generate quality leads for a lot less money. According to IBM, when data is created, we produce 2,6 quintillion bytes of data per day [13]–[15].

1.3.3 Content Marketing:

A marketing strategy known as marketing content aims to produce, distribute, and deliver material to a specific internet audience. Businesses also utilize it to achieve the following objectives: brand awareness or reputation building, lead creation, customer base development, and online income generation or increase. By producing and disseminating helpful free information, content marketing aims to attract new customers. It enables businesses to build long-lasting brand loyalty, gives customers helpful information, and gets them ready to buy from the company again in the future.

Identifying the client's demands is the first step in content marketing. Following that, the information may be disseminated by a variety of channels, such as news, images, "White papers, e-books, email newsletters, studies, movies, how-to manuals", Q&A pieces, images, websites, etc. It is essential for content marketing to produce quality material regularly, ideally through a content marketing plan. From the 1940s through the 1950s, when television was in its prime, ads dominated the media. Businesses focused on making money rather than interacting with the general audience. For content marketing, there haven't been enough initiatives and effective campaigns [16].

After the baby boom, Kellogg's started providing youngsters with spicier cereals. So, in the business model, social dogs, vivid cartoon PR shops, and the backside were transformed into a customized content marketing system. Infographics were created in this period. It was a cutting-edge strategy for leaving a lasting impression on customers. Something changed in advertising in the 1990s. Websites and blogs have grown thanks to computers and the Internet, and businesses have discovered ways to sell material via e-mail.

The marketing strategy was built around developments in technological deliveries and e-commerce. The Internet has also helped content marketing become more widely used. Using mass media, such as radio, TV, periodicals, and magazine articles, the market has started to lose its influence. Businesses are now marketing and advertising their items online. In the late 2000s, when social networks like Facebook, Twitter, and YouTube emerged, the selling of internet content became more widely observed, circulated, and accessible. The seven most popular methods by that companies sell content were featured on the Forbes Magazine website in 2014. According to the writer in this article, 93 percent of organizations' overall marketing campaigns in 2013 used digital marketing, up from 60 percent a year earlier.

1.3.4 Pay Per Click (PPC):

PPC is the online promotional template that makes use of the advertiser to drive traffic to websites if the promotion is focused on and the merchant gets paid. Top-ranking search engines and pay-per-click are frequently linked. Standard practice is for advertisers to submit bids on phrases based on keywords related to their target audience and pay for advertising as a consequence of search results. On the other hand, content platforms frequently levy a flat cost per click rather than bidding.

PPC advertisements sometimes referred to as banner ads and placed on websites with comparable content, are selected to see advertisements that are typically not sponsored advertisements. Online communities like LinkedIn, Facebook, Twitter, and Pinterest are one of their pay-per-click advertising methods. The price that companies engage varies from advertiser to advertiser and is often based on the entrepreneur's two main characteristics: ad

concentration and the highest possible revenue per click. The quality of the ads improves with decreasing cost per click, and vice versa [17].

However, the websites will have PPC advertisements available. When a keyword search contains a list of clients' keywords connected to various ad segments, or if the advertise platform's content reveals the required content, websites employing PPC advertisements display an advertisement. These adverts, sometimes referred to as programs to help employees or endorsed advertisement, are presented next to, beneath, or below organically occurring results on search engine websites or in other places on a visual that even the web uses designer likes.

The Pay per Click advertising strategy is vulnerable to misuse through click fraud, even though Google and others have created automated mechanisms to shield them against malicious clicks from competitors or dishonest Web developers. Regardless on the pricing range of your products, if your company would be a business-to-consumer (B2C) corporation, your customer engagement approach would draw people to your internet sites and they would become clients without always communicating to a sales consultant.

Concerning this sentence, you are often less preoccupied with "creation" in its traditional sense and more interested in providing a short route for customers to take from the moment they arrive at the site to the period they make a purchase. This often suggests that the elements of your content in your work are greater than others in a business-to-business (B2B) company's commercial funnel, and you must employ strong calls to action (CTAs) [18], [19].

Pay-per-click, which includes printing costs and costs according to order, is used to assess the cost-effectiveness and feasibility of digital marketing. The cost per thousand impressions, or CPM, is all that the advertising agency pays for the advertisement (CPM). PPC offers a benefit over printing expenses by disseminating data on the efficacy of advertisements. Pay-per-click is the preferred method of computation when an advertisement's primary objective, or specified objective, is to generate clicks or direct visitors to a target. Estimating awareness and exposure involves clicking. The consistency and placement of the advertisement determine the click-through rate and the total cost of the pay-per-click campaign [20].

Networks like Instagram and Youtube may frequently be more important for B2C businesses than business-focused sites like LinkedIn. While YouTube marketing is effective when the corporation having to carry an entity is tiny or individual [21].

Benefits of YouTube:

- Google mail will make it possible for YouTube viewers to find you. You get exposure on YouTube to a huge audience.
- Effective traffic acquisition;
- Higher video conversion rates.
- To reach a wider audience, use YouTube commercials.

Disadvantages of YouTube:

- All doors must be open.
- There are several regulations, and your account may be disconnected for any reason.
- Your video may be enhanced by any advertising firm.

YouTube is a digital platform for sharing videos on the internet that was developed in the United States of America and is situated in San Bruno, California. Users of YouTube may

upload, view, share, report, rate, and comment on other users' videos as well as add them to playlists and subscribe to them. The video clip, music videos, there are many different sorts of content that may be discovered on YouTube, including TV program clips, short films, audio recordings, documentaries, movie trailers, video blogging, live streams, short original videos, and instructional videos. A single individual often creates and uploads the majority of the content. Unregistered individuals can only view videos; however, registered users can post a variety of user-generated and provide comments. More than 500 hours of video were posted to YouTube every minute up until May 2019, including one billion streams of content were seen there each day.

2. LITERATURE REVIEW

Afrina Ysmin et al. in their study embellish that analyze various aspects of digital marketing and how they affect sales in around fifty companies using the technique. The author used a technique and claimed that marketing had a significant influence on the internet company. The survey's findings indicate that, in a manner akin to the adage "Rome wasn't built in a day," successful digital marketing outcomes require participation and experimentation (and error). The author concludes that all efforts in digital marketing should be centered on the maxims "test, learn, and develop." To follow the most effective course for marketing, organizations need to create unique consumer experiences and specific media tactics. The conducted poll yields no information on increased sales as a result of digital marketing [22].

V. Kumar and Rohan Mirchandani in their study illustrate the significant return on investment (ROI) of the effects of a certain campaign when executed on Facebook and Twitter, as well as social media marketing at the consumer and organisational levels. According to the author's strategy, the campaign had a considerable impact on both the organisational and consumer level. The results show that social media accounts had the greatest impact on consumers. The author notes that while most businesses are still grappling with social media duties, the use of the analytics gave Hokey Pokey a significant competitive advantage, and that the poll does not give an idea of the effect of digital marketing when done on YouTube [23].

Alireza M et al. in their study embellish that social media has a significant effect on how individuals do business. The author used an approach where they polled people who utilize social media for online buying. The findings demonstrate that social media fosters positive relationships, and as a result of these positive relationships, revenues improve. A second hypothesis stated that customers become more aware of a company's products and services. The author concludes that neither survey's brand capacity offers any insight into how social media platforms like YouTube may affect growth in popularity [24].

In this research, the author elaborates that this campaign had a significant influence on both the organization and the consumers. The findings reveal that social media account has the biggest influence at the consumer level. The author concludes that while the majority of businesses are still struggling with social media responsibility, had a significant competitive advantage thanks to the use of metrics. However, the survey does not provide any insight into the effects of digital marketing when done on YouTube.

Research Question:

How does a youtube advertisement is helping a young individual in earning money?

How youtube is affecting the new modern era of technology?

What effect does YouTube have on modern marketing?

3. METHODOLOGY

3.1.Design:

To conduct the poll, a questionnaire was handed out candidates for college and office who commonly use social media in the park. Table 1 shows the survey form that was distributed at a park and a college to choose the survey respondents in order to ascertain the potency of YouTube as a marketing tool.

Table 1: Illustrates the survey questionnaires were given at a park and a college to find the responses for the research to ascertain the efficacy of YouTube as a method of advertising.

Sex: Name: Occupation: Age:	
Utilize social media?	Never: 3-4 days a week: Regularly:
What social media site do you utilize?	YouTube – Yes No Facebook – Yes No Snap Chat - Yes No Instagram - Yes No Twitter– Yes No LinkedIn– Yes No
Daily time spent on YouTube (in hours)	Time (in hours):

3.2.Instruments And Sample:

Candidates who routinely use social media, particularly YouTube, were collected for the poll, which was done on individuals from various age groups. Finding out how successful YouTube is at promoting is the major goal of utilizing YouTube to find candidates. 100 applicants in all were chosen for the survey and split into two groups, A and B. Candidates in groups A and B ranged in age from 18 to 35 and from 35 to 70, respectively.

3.3.Data Collection:

The study was conducted among all candidates who frequently use social media, with a focus on those who use YouTube to discover new songs and musicians. After that, all of the applicants were split into two groups, A and B, and the survey was conducted with a total of

100 participants. Those aged 18 to 35 were in the A group, while candidates aged 35 to 70 were in the B group. The number of musicians that each applicant routinely listens to and follows on YouTube was questioned. The average outcome of the offline watching of the talent show and the offline listening to other singers were compared for both the A and B groups. The results of the poll used to gauge YouTube's effectiveness as a digital marketing tool are shown in Table 2.

Table 2: Displays the findings of a survey done to evaluate YouTube's efficacy as a digital marketing tool.

Group A and B	Highly Successful Results (Out of the 25 contestants, the total number of candidates exhibiting the results)	Average Effective Outcomes (Out of the 25 contestants, the total number of candidates exhibiting the results)	Very Limited Effectiveness (total number of candidates showing the results out of 25 candidates)
A weekly group for people ages 18 to 35 (25 candidates)	18	4	2
Weekly B Group 35 to 70 years (25 candidates)	15	7	3
A daily group of 18 to 35 years (25 candidates)	16	5	4
Daily group B, 35 to 70 years old (25 candidates)	14	8	3

3.4. Data Analysis:

All applicants between the ages of 18 and 35 who use social media, as well as seniors between the ages of 35 and 70 who use YouTube often, are taken into account for the survey. In their questionnaire, a few questions were asked of each candidate. Few candidates watched YouTube for 0:30 to 1 hour per week and 1-3 hours per day. We inquired into the quantity of artists following and videos seen in a week for both categories. To determine how effective YouTube is as a social media network, Members of YouTube groups were asked about their browsing patterns over the past 30 days on a weekly and daily basis. 50 applicants in the daily group and 50 candidates in the. The A Group, which included those between the ages of 18 and 35 every week, the A Group, which included those between the ages of 18 and 35 every day, the B Group, which included those between the ages of 35 and 70 every week, and the B Group, which included those between the ages of 35 and 70 every day, each had 25 candidates in total present which consisted of those who were between the set.

4. RESULTS AND DISCUSSION

A group and B group applicants for the survey ranged in age from 18 to 35, while candidates for the B group were between the ages of 35 and 70. 100 candidates in all were polled. 50 applicants were split between group A and group B. All of the applicants who were taken into consideration for the study used the social networking site YouTube on a daily or weekly basis for at least an hour, but none of the candidates kept track of their exact time spent there.

The average result achieved for both the A and B groups was taken into consideration after totalling the number of hours an artist spent viewing music videos on YouTube and offline throughout a month. All applicants between the ages of 18 and 35 who use social media, as well as seniors between the ages of 35 and 70 who use YouTube often, are taken into account for the survey. In their questionnaire, all candidates were asked a few questions.

Few applicants watched YouTube for less than an hour a week and for more than three hours a day. Each group was asked by the author how many artists they followed and what videos they had seen the week before. Members of YouTube groups were surveyed on a weekly and daily basis about their surfing habits over the previous 30 days to ascertain the effectiveness of YouTube as a social media network. There were 50 participants in the poll—50 for the weekly group and 50 for the daily group. There were a total of 25 applicants in the A Group, including 25 candidates who were 18 to 35 years old each day, 25 candidates who were 18 to 35 years old each week, and 25 candidates who were 35 to 70 years old each week. A group of 100 applicants, consisting of those between the ages of 18 and 35, and a second group, consisting of those between the ages of 35 and 70, were separated. The combined average of the A and B. When the A and B groups viewed talent shows offline and listened to different vocalists, the average results of both groups were compared. As a consequence, the study shows that YouTube was rated as a very successful digital advertising platform for social media.

5. CONCLUSION

The poll was done on 100 applicants of different ages, Age groups A and B are 18 to 35 and 35 to 70 respectively. Every candidate had previously followed artists on YouTube, but not all of them had looked into the precise methods of following. The number of hours spent was analyzed, together with the candidate's YouTube search preferences, suggested videos that the candidate watched, and films that the candidate neither needed nor thought of as YouTube advertisements but rather watched because they were the candidate finds this intriguing. Consideration was given to the typical standalone watch behavior compared to YouTube. There were a total of 25 candidates present: 25 candidates in the A Group, which included people seen between the ages of 18 and 35 every week; 25 candidates in the A Group, which included people seen between ages of 18 and 35 every day; 25 candidates in the B Group; which consisted of those who were between the ages of 35 and 70 every week, 25 individuals made up the B Group, which included someone who was between both the When the A and B groups viewed talent shows offline and listened to different vocalists, the average results of both groups were compared. The study's findings so show that YouTube was regarded as a very successful internet advertising basis for social media. Thus, the current study serves as a springboard for further investigation into the connection between talent marketing and various social media platforms.

REFERENCES

[1] B. McDaniel, “Popular music reaction videos: Reactivity, creator labor, and the performance of listening online,” *New Media Soc.*, 2021, doi: 10.1177/1461444820918549.

[2] M. Airoldi, D. Beraldo, and A. Gandini, “Follow the algorithm: An exploratory investigation of music on YouTube,” *Poetics*, 2016, doi: 10.1016/j.poetic.2016.05.001.

[3] T. Adeyinka, F. Okemute, and A. Tella, “Perception and Use of YouTube by Music Lecturers and Librarians in Selected Tertiary Institutions in Kwara State, Nigeria,” *Int. Inf. Libr. Rev.*, 2018, doi: 10.1080/10572317.2018.1435148.

[4] U. Hadjis Labarca, “Music streaming and its consequences within the dynamics of power, consumption and creation,” *Teknokultura. Rev. Cult. Digit. y Movimientos Soc.*, 2020, doi: 10.5209/tekn.68748.

[5] E. R. Praliansyah, “YouTube Sebagai Arena Produksi dan Reproduksi Kultur Hip-Hop,” *Antropol. Indones.*, 2021, doi: 10.7454/ai.v42i1.12999.

[6] E. Serdaroglu, "Exploring the Use of Youtube by Symphonic Orchestras as An Educational Platform During the Pandemic of Covid-19," *Eur. J. Soc. Sci. Educ. Res.*, 2020, doi: 10.26417/770wga72a.

[7] G. Lancaster, L. Massingham, and W. Ozuem, "Digital marketing," in *Essentials of Marketing Management*, 2018. doi: 10.4324/9781315177014-11.

[8] P. Kotler and G. Armstrong, *Kotler & Armstrong, Principles of Marketing | Pearson*. 2018.

[9] N. Morris, "Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation," *J. Direct, Data Digit. Mark. Pract.*, 2009, doi: 10.1057/dddmp.2009.7.

[10] S. Y. Kim, "Beauty and the Waste: Fashioning Idols and the Ethics of Recycling in Korean Pop Music Videos," *Fash. Theory - J. Dress Body Cult.*, 2021, doi: 10.1080/1362704X.2019.1581001.

[11] C. Jost, "How to play … popular music: Didactic action and the display of musical expertise in online tutorials," *Stud. Commun. Sci.*, 2020, doi: 10.24434/J.SCOMS.2020.02.002.

[12] R. Avriyanty, "Analysis of Audience Reception on Youtube towar d Gender Construction in the Music Video If I Were a Boy by Beyonce Knowles," *Paradig. J. Kaji. Budaya*, 2016, doi: 10.17510/paradigma.v2i1.20.

[13] K. A. Suputra, I. A. P. Widiati, and N. M. S. Karma, "Perlindungan Hukum terhadap Pencipta Musik sebagai Suara Latar di Youtube," *J. Interpret. Huk.*, 2020, doi: 10.22225/juinhum.1.1.2220.77-82.

[14] Y.-H. Kang and J.-H. Park, "The Relationship between Youtube Music Video Views and Visual Characteristic: Focused on K-pop Music Video," *J. Korea Entertain. Ind. Assoc.*, 2020, doi: 10.21184/jkeia.2020.12.14.8.63.

[15] S. Suryati, "Pemanfaatan YouTube sebagai Media Pembelajaran Vokal Pop Jazz di Prodi Pendidikan Musik Institut Seni Indonesia Yogyakarta," *Resital J. Seni Pertunjuk.*, 2021, doi: 10.24821/resital.v22i2.6040.

[16] P. K. Kannan and H. "Alice" Li, "Digital marketing: A framework, review and research agenda," *Int. J. Res. Mark.*, 2017, doi: 10.1016/j.ijresmar.2016.11.006.

[17] K. Fjell, "Online advertising: Pay-per-view versus pay-per-click A comment," *J. Revenue Pricing Manag.*, 2009, doi: 10.1057/rpm.2008.39.

[18] E. Clarke, T. DeNora, and J. Vuoskoski, "Music, empathy and cultural understanding," *Physics of Life Reviews*. 2015. doi: 10.1016/j.plrev.2015.09.001.

[19] A. Ryabovolova and J. Hemment, "'Je suis Satisfaction:' Russian politics in the age of hybrid media," *East Eur. Polit.*, 2020, doi: 10.1080/21599165.2019.1630381.

[20] P. S. H. Leeflang, P. C. Verhoef, P. Dahlström, and T. Freundt, "Challenges and solutions for marketing in a digital era," *Eur. Manag. J.*, 2014, doi: 10.1016/j.emj.2013.12.001.

[21] S. Medioni and S. Benmoyal Bouzaglo, *Marketing digital*. 2018. doi: 10.3917/dunod.medio.2018.01.

[22] A. Yasmin, S. Tasneem, and K. Fatema, "Effectiveness of Digital Marketing in the Challenging Age: An Empirical Study," *Int. J. Manag. Sci. Bus. Adm.*, 2015, doi: 10.18775/ijmsba.1849-5664-5419.2014.15.1006.

[23] V. Kumar and R. Mirchandani, "Increasing the ROI of social media marketing," *MIT Sloan Manag. Rev.*, 2012, doi: 10.1109/emr.2013.6596535.

[24] A. Mohammadpour, T. R. Arbatani, T. H. Gholipour, F. Farzianpour, and S. Hosseini, "A Survey of the Effect of Social Media Marketing on Online Shopping of Customers by Mediating Variables," *J. Serv. Sci. Manag.*, 2014, doi: 10.4236/jssm.2014.75034.

CHAPTER 16

AN ANALYSIS OF THE IMPORTANCE OF SEX EDUCATION FOR REPRODUCTIVE HEALTH AWARENESS: A PERVASIVE SURVEY

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ABSTRACTS: ***Sexual problems increasing day by day because the young generation is not aware of that. The accuracy of the content, priority, and efficacy of current sex education programs vary greatly. Sex education, also known as "sexual or reproductive health education", has always been a sensitive topic. The main goal of this paper is to understand public opinion about reproductive health and sex education with the help of online surveys. The finding of this study indicates that the majority of teachers, including parent teachers and other stakeholders in the education system, support sex education in schools and believe in starting it before the age of 15 years. Most respondents believe that the Ministry of Education (34%) provides guidelines or instructional material. However, teachers may feel left out when it comes to teaching sex education due to insufficient support provided and confusing protocols in place in schools. In the future, this paper provides awareness about the importance of reproductive health and sex education.***

KEYWORDS: ***Adolescents, Ministry of Education, Reproductive Health, Sex Education, Sexual.***

1. INTRODUCTION

Currently, sex education, which is a component of reproductive health education, is prohibited in certain tribes. They argue that lectures on reproductive health must not be taught to young children. Teenagers who get sexual education are adequately knowledgeable about sexual behavior to prevent sexual assault or abuse [1], [2]. The program helps young people understand all facets of consent but also encourages them to make moral decisions about their sexual interactions. Due to two reasons, it is crucial to teach kids about reproductive health:

i. When they are teenagers, they would not recognize this because it is still taboo for parents to discuss it with them, and as a result, they will not feel responsible for teaching them about sex as well as the anatomy of the reproductive system.
ii. Children who do not understand the importance of sex education and reproductive health are more likely to be misinformed. Extramarital sex, unwanted pregnancies, STDs, and other problems are all negatively impacted by the repercussions of this misconception.

Adolescence, which is marked by significant biological changes including sexual maturation, physical growth, and psychological development, is the time when childhood ends and adulthood begins. In this stage of development, girls encounter their first periods and the problems that go along with them [3], [4]. These issues need to be carefully examined since left untreated, menstrual issues can negatively impact everyday living and quality of life. A crucial component of health education is the understanding and behavior around the usage of sanitary products throughout menstruation. There is a lack of information on the reproductive as well as general health issues facing this young demographic, which prevents the implementation of effective initiatives [5], [6]. Despite menstruation being a normal phenomenon, it is often associated with misunderstandings and habits that harm health. Planning a program for this vulnerable population will be easier if you are aware of the beliefs, customs, and issues around menstruation and reproductive health [7], [8].

For girls or women, especially those living in urban slums, to learn and develop the information, examine their beliefs and attitudes, or practice the decision-making as well as other life skills required to make educated decisions regarding their reproductive health. Even if it only forms a small element of a multidisciplinary strategy to improve sexual and reproductive health outcomes, an organized opportunity for sexual or reproductive health education. Adolescents must receive timely, accurate, or thorough instruction in sexual or reproductive welfare and health, but also life skills, in order to achieve these goals and prevent adverse health effects. This suggests that sex education should enlighten people about a range of reproductive health issues, such as information on STIs and different types of contraception and their advantages and disadvantages. Sex education might even raise understanding of contraceptives, the likelihood that someone will use contraception at their first sexual encounter and throughout their lifetime, and the efficiency with which they utilize existing methods [9].

The most effective programs for sexual or reproductive health education are those that support the reduction of misinformation and the provision of accurate information, the clarification of values and the reinforcement of positive attitudes, as well as the improvement of communication or decision-making abilities [10], [11]. Evaluation studies conclude that sexual and reproductive health education does not promote sexual activity. Lack of access to out-of-school kids and other marginalized youth groups is one barrier to women's reproductive health education. Many young people, especially girls as well as young women, who often drop out of primary school for many social and economic reasons, are not enrolled in any educational program when they are in greatest need of knowledge and instruction. To reinforce messages throughout time with age-appropriate content and perspectives, it is important that education on women's reproductive health and sexual information begins at an early age and continues into puberty [12], [13].

Students who get excellent “sexual health education” (SHE) are better equipped to maintain their health, avoid “sexually transmitted diseases” (STDs), or avoid accidental pregnancy [14]. A SHE curriculum includes knowledge and competencies that are culture-relevant, age-appropriate for children, and focused on key behavioral goals that support healthy sexual development. All grade levels will receive exposure to health risk behaviors as well as experiences in level-appropriate development of the curriculum [15]. To be effective, sexual health education must follow best practices, take into account scientific research, reflect the variety of student experiences, and take into account the requirements of the student's family, society, and school.

1.1. Advantages of Teaching People about Sexual Health:

Several ways that promoting and executing well-designed SHE programs benefit student health are listed below. Participating in these programs increases the likelihood that students will:

- Delay starting a sexual relationship
- Lessen your sex partners
- Lessen your exposure to unprotected sex
- Increase the usage of condoms as a form of protection
- Enhance the student's academic achievement.

A high-quality sexual health education (SHE) program may be modified to cover topics including high-risk drug use, suicide prevention, as well as how to stop kids from committing or being the victims of violent acts, behaviors, or experiences that put young people at risk for poor health or academic results. Along with sexual behavior knowledge and abilities,

these subjects can be discussed. In this paper, the author talks about awareness of sexual and reproductive health education and its benefits.

2. LITERATURE REVIEW

Jolien van der Geugten studied investigating the sexual or reproductive health (SRH) program. The SRH program served as the intervention in the study, which employed a pre-post-intervention approach. 312 students completed a questionnaire well before the SRH program, and 272 students completed it after. The findings indicated that students' intentions regarding SRH behavior, such as using condoms, were favorable before the program and that they thought positively about making their own decisions on whether to have a relationship or have sex. The pupils' understanding increased somewhat but significantly as a result of the SRH intervention. The pupils between the ages of 18 and 20 were also found to have much better attitudes. It can be said that the SRH program had a beneficial overall effect, and substantial impacts on gender or age were discovered [16].

Murdiningsih studied the impact of adolescent reproductive health education on sexual behavior. This study has a pre/post exploratory approach and was based on the requirements for the sample sizes, 192 students were gathered. Premarital sexual behavior or the Chi-Square confounding variable was submitted to bivariate analysis after the intervention, as well as the findings, showed a strong association between knowledge of sex, reproductive health, and attitudes toward premarital sexual behavior. The multivariate analysis's findings indicate that the awareness of reproductive health is the dominant variable (p=0.00). According to this study, the curriculum must incorporate lessons on teenage reproductive health, particularly in biology class [17].

Meltem Kurtuncustudied the sexual growth or education of preschool children. To determine the level of perceptions and awareness of doctors or nurses on sex education as well as the sexual growth of children, a descriptive study was undertaken. Participants in the research were medical professionals who operate in various clinics at two public hospitals in the province of Istanbul. The questionnaire had 58 questions. It was found that women over the age of 36 made up 61 percent of the respondents (54.1 percent). In the study, 62.1 percent of respondents were doctors and 63.5 percent had bachelor's degrees. The findings of this study demonstrated that shyness and embarrassment are quite common and that culture has a considerable impact on sex-related attitudes [18].

Cornelius C. Okoro et al. examined the effect of sexual imagery in popular media on adolescents attending public universities. A researcher-created questionnaire was utilized in the study to gather information from a random sample of 1580 teenagers enrolled in public institutions in Nigeria's Akwa Ibom State. A scale of sexual attitudes toward the sexuality question among students from higher institutions also had a credibility rating, as did a measure of students' media exposure to sexual or violent content. Data study revealed that compared to kids who were exposed to less sexual material in popular media, those pupils had more aversive sexual behavior. It was proposed that a well-designed sex education program may aid youngsters in changing their sexual orientation by assisting them in unlearning the harmful messages propagated by the media [19].

The lack of misconceptions and awareness about sex education is increasing day by day, so education is very important for the understanding of sex education and reproductive health. Numerous studies have been conducted on this subject, however, some of them did not provide accurate and reliable results. The authors of this study ran an online survey to gauge participants' knowledge of sexual and reproductive health, provided accurate data, and then came to a conclusion.

Research Question:

- Why sex education is important in the present world?
- What are the problems arising out of the lack of sex education?

3. METHODOLOGY

3.1. Design:

The study was conducted through online interviews with a variety of people from different locations and backgrounds, and to get their opinions about reproductive health and sex education, young people should know what age young people should be eligible for sex education. Through this research, accurate and appropriate data can be collected to understand the awareness of reproductive and sexual information.

3.2. Sample and instrument:

For this research 500 random people have been selected for an interview and their opinion about reproductive health and sex education, and the respondents of the survey were given the results. There is some question that will be asked for a better understanding of it which is shown below:

- At what age do you think young people should first learn about sexual and reproductive health in school?
- In your opinion, who should talk to young people about sexual and reproductive health?
- Who encourages teachers in your area to talk to students about sexual and reproductive health?
- What topics are covered or are you aware of in the sexual or reproductive health curriculum at your school?
- Does the school/staff have a defined process for assisting specific students with questions related to their sexual or reproductive health?

3.3. Data Collection:

The data is collected through online interviews, and interview questions will be framed to understand the importance of sexual and reproductive health in the current scenario. Everyone should get high-quality sex education, but only some teens do. It is quite challenging to teach sex education in our educational system due to India's socio-cultural variety and other political difficulties. Due to differences in culture and ideas, when someone attempts to teach about that as well, people have interpreted it unfavorably. However, things would soon change as well as a healthy approach to imparting such lessons will be available.

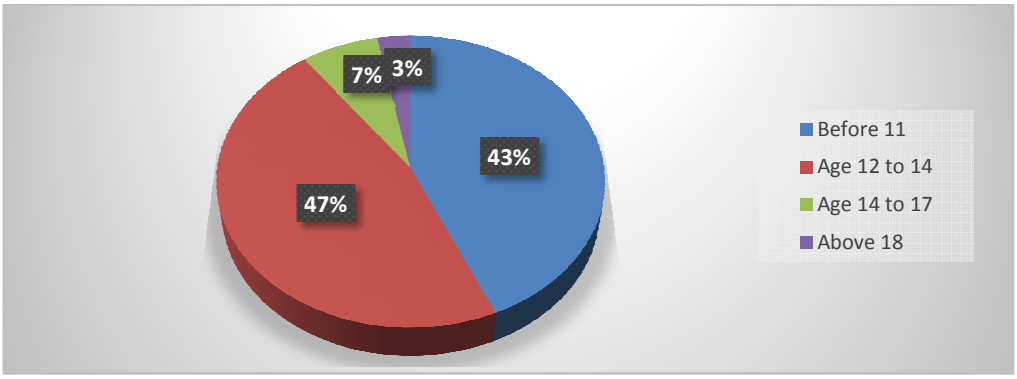

Figure 1: Illustrate the Age for Which Students should be Studying Sexual and Reproductive Health in School.

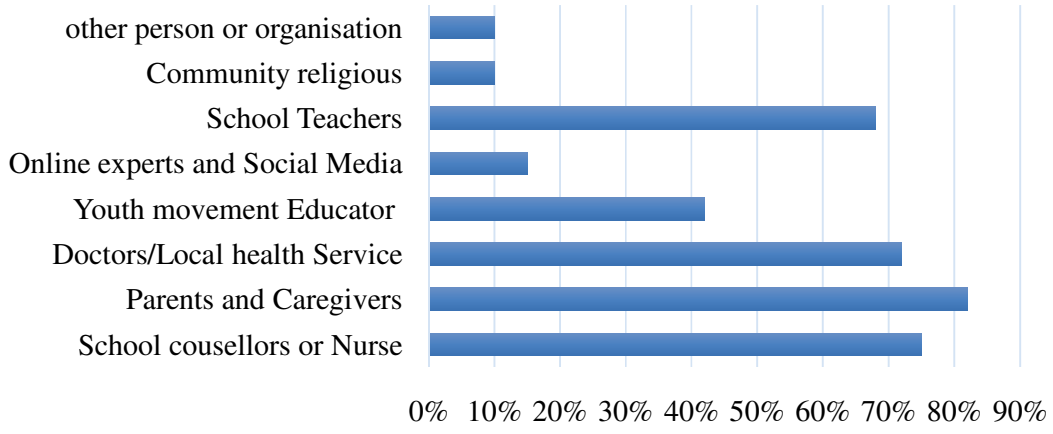

Figure 2: Illustrate the Percentage of People that Provides Information about Sexual and Reproductive Health to Young People.

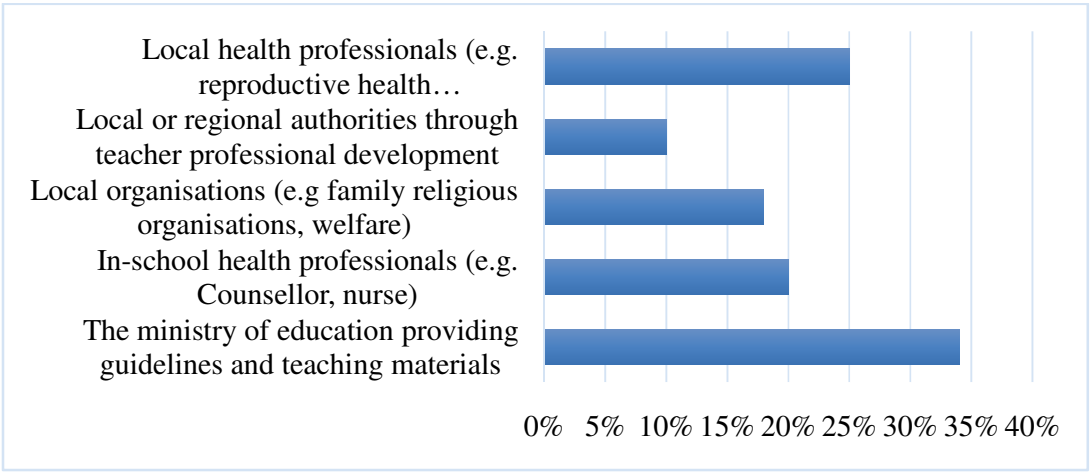

Figure 3*:* Illustrate that Encourages Teachers in your Area to Talk to Students about Sexual or Reproductive Health.

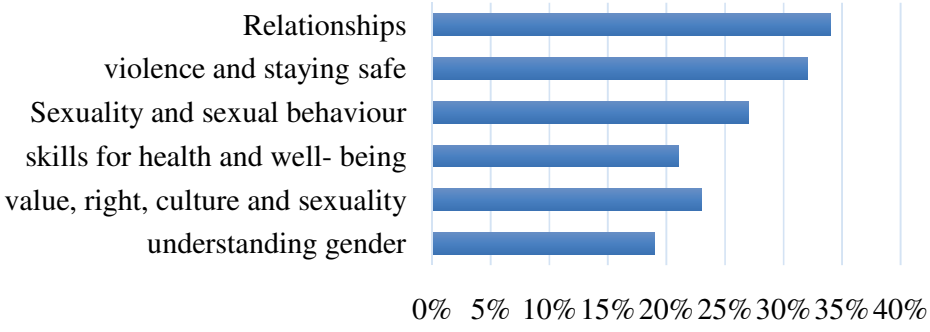

Figure 4: Illustratethatyou are aware of the sexual or reproductive health curriculum in your school.

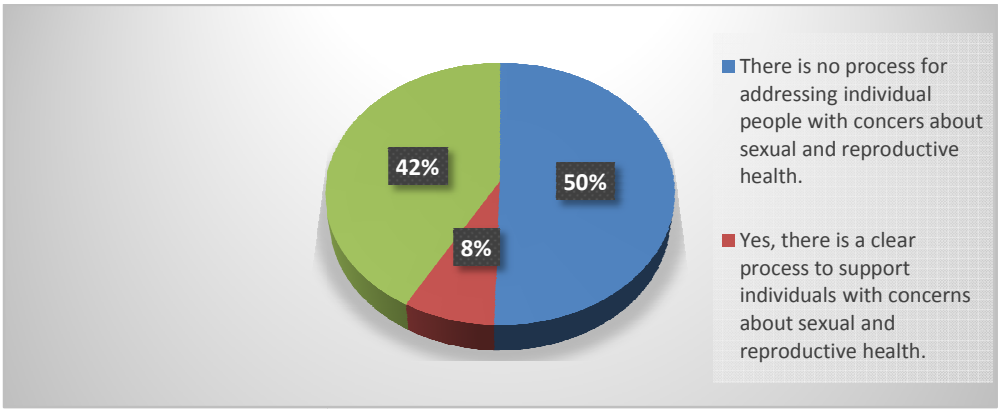

Figure 5:Describe the Process that can Make People Aware of Sexual and Reproductive Health.

3.4. Data analysis:

Figure 1, shows most respondents (47%) believe young people should have a conversation about sexual and reproductive health, opinions differ on when this conversation should take place, according to the survey. Almost the majority of participants (43%) believe that young people should be aware of sexual or reproductive health before the age of 11, and 7% feel that they have received sex education between the ages of 14 and 17. should be able to. And 3% of people believe youth should know. About sexual and reproductive health for those over the age of 18. One in 7 participants, a small but significant minority, said that children must be 16 years of age or older before sex education can begin in the classroom.

Figure 2 shows that more than three-quarters (82%) of respondents asked who should be teaching young people about sexual or reproductive health thought that parents or caregivers were the best options. Some also think that school counselors (75%), therapists and medical services (72%), and trainers (68%) are suitable prospects. Participants suggested that youth movement teachers and after-school teachers should share responsibility (42%). Youth should consult internet resources, including professionals and social media networks, according to one in six respondents. Fewer participants (10%) said that sex education and reproductive health should be taught by other organizations or people.

Figure 3, shows that more than half of respondents (53%) stated there is no pertinent support for teaching sexual education in schools, and one-third of respondents (34%) said their ministry of education provides teachers with guidelines and teaching materials. Additionally, 25% of the respondents said that some assistance is also provided by regional medical experts. As per the survey, most of the respondents claimed that local organizations and in-school health specialists like counselors or school nurses 20 % help instructors 18%. Only one in every ten local or regional administrations provides teachers with professional development in sex education and reproductive health.

Figure 4 shows that most of the respondents (21%) claimed that the human body and its development is the subject that is studied the most in their school or any other school that they are aware of. Relationships are taught as part of sex education in nearly a third of schools, including 34% of families, friendship, love, and romantic relationships, as well as violence, and the remaining 32% allow confidentiality and physical integrity. Subjects that are least covered in schools, but still taught in a large proportion of them, include

understanding gender 19% and skills for health and wellness 21% as well as values, rights, culture, and sexuality comprising 23%.

Figure 5, shows that half of the respondents 50% believe that there is no applicable mechanism in place at their school or a school they are aware of that handles student concerns about sexual and reproductive health. However, 42% of participants claimed that instructors often decide to take issues into their own hands and deal with such worries on an individual basis. Only 8% of respondents indicated that teachers are given specific instructions on how to assist students with problems, queries, and concerns relating to their sexual health.

4. RESULT AND DISCUSSION

Medical practitioners may find it challenging to discuss sexual and reproductive health with teenagers and young adults, even though it is a crucial aspect of human development. As a result, although WHO or the United Nations recognize that access to sex education is a human right, many adolescents and youth do not receive adequate, complete instruction. However, compared to their peers with disabilities, these individuals are less likely to obtain comprehensive sex education. Sexual activity is equally likely to occur in adolescents or young adults with modest to fairly severe intellectual disabilities, or both. Sexual health instructors must enable dialogues about sexual or reproductive health that are non-judgmental as well as sexually inclusive to guarantee that teenagers and young adults with intellectual or developmental impairments get proper comprehensive sexual education. These programs should be built on an educational framework that prioritizes inclusive learning design and makes use of a variety of media with brief, clear language and graphics.

The findings of our most recent survey indicate that most instructors, including teachers, parents, as well as interested parties, are participating in the educational system, even though sexual education, also called “reproductive and sexual health” instruction, was always a difficult subject. The start of it in the educational system is even before age of 15. However, educators could feel isolated in their opportunity to educate sex education given the more ambiguous rules that are accessible in schools. Because of the need for change and how it will impact the developing brain as a teenager, it has been important to teach young children about reproductive health.

Finding:

- Most people believe that sex education should be given to young people between the ages of 12 and 14.
- Most people (82%) believe that youth should seek sexual information from their parents and caregivers.
- Most of the respondents believe that the Ministry of Education (34%) provides guidelines or instructional material.
- About 35% said that the sexual or reproductive health curriculum at your school included relationship topics.
- Almost half of the respondents said there is no process in place to address those with concerns about sexual or reproductive health.

5. CONCLUSION

According to the study, a sizable majority of respondents concur that sex education, as well as reproductive health, must be addressed in schools. The majority of respondents also think that the conversation should start before the age of 15. The majority of respondents (34%) think that the Ministry of Education offers guidelines or teaching resources. For instance, it

was found that topics like sexual and reproductive health but also human anatomy as well as development are more frequently presented in class. Less frequently discussed in schools are sexuality or sexual behavior, sexuality, and morals, including gender awareness. Additionally, it is thought that childcare teachers, parents, and other adults may have these important interactions with today's youth. Despite this, the "Ministry of Education" provides only a third of the teachers with the necessary teaching materials, while only a tenth receives the necessary training. Additionally, it is claimed that only a small percentage of institutions have a set protocol in place to deal with the needs of students and issues related to sex education. Considering the absence of procedures in schools, four out of ten teachers still work alone to provide students with the help and answers they need. With the use of online surveys, the major objective of this research is to comprehend popular perceptions about sex education and reproductive health. Future papers will raise awareness of the significance of sexual and reproductive health.

REFERENCES

[1] E. S. Goldfarb and L. D. Lieberman, "Three Decades of Research: The Case for Comprehensive Sex Education," *Journal of Adolescent Health*, vol. 68, no. 1. pp. 13–27, 2021. doi: 10.1016/j.jadohealth.2020.07.036.

[2] R. Saul Butler, D. Sorace, and K. Hentz Beach, "Institutionalizing Sex Education in Diverse U.S. School Districts," *J. Adolesc. Heal.*, vol. 62, no. 2, pp. 149–156, 2018, doi: 10.1016/j.jadohealth.2017.08.025.

[3] L. D. Lindberg, I. Maddow-Zimet, and H. Boonstra, "Changes in Adolescents' Receipt of Sex Education, 2006-2013," *J. Adolesc. Heal.*, vol. 58, no. 6, pp. 621–627, Jun. 2016, doi: 10.1016/j.jadohealth.2016.02.004.

[4] W. Krebbekx, "What else can sex education do? Logics and effects in classroom practices," *Sexualities*, vol. 22, no. 7–8, pp. 1325–1341, 2019, doi: 10.1177/1363460718779967.

[5] J. Martin, H. Riazi, A. Firoozi, and M. Nasiri, "A sex education program for teachers of preschool children: A quasi-experimental study in Iran," *BMC Public Health*, vol. 20, no. 1, p. 692, Dec. 2020, doi: 10.1186/s12889-020-08826-y.

[6] D. Schaafsma, G. Kok, J. M. T. Stoffelen, and L. M. G. Curfs, "People with Intellectual Disabilities Talk About Sexuality: Implications for the Development of Sex Education," *Sex. Disabil.*, vol. 35, no. 1, pp. 21–38, 2017, doi: 10.1007/s11195-016-9466-4.

[7] A. Jacquerye, "A revolution in sex education using sex robots," *Paladyn*, vol. 11, no. 1, pp. 351–356, 2020, doi: 10.1515/pjbr-2020-0024.

[8] R. Seiler-Ramadas, I. Grabovac, R. Winkler, and T. E. Dorner, "Applying Emotional Literacy in Comprehensive Sex Education for Young People," *Am. J. Sex. Educ.*, vol. 16, no. 4, pp. 480–500, 2021, doi: 10.1080/15546128.2021.1932657.

[9] L. M. Krull, L. D. Pearce, and E. A. Jennings, "How religion, social class, and race intersect in the shaping of young women's understandings of sex, reproduction, and contraception," *Religions*, 2021, doi: 10.3390/rel12010005.

[10] M. Thompson, L. Davis, V. Pendleton, and R. Shlafer, "Differences in Sexual Health Outcomes Between Adolescents in Public Schools and Juvenile Correctional Facilities," *J. Correct. Heal. Care*, 2020, doi: 10.1177/1078345820953405.

[11] M. Jannah, P. R. Meikawati, and S. Artanti, "Reproduksi Sehat, Remaja Sehat di Posyandu Remaja Pashmina," *J. ABDIMAS-HIP Pengabdi. Kpd. Masy.*, 2021, doi: 10.37402/abdimaship.vol2.iss2.152.

[12] A. Nadeem, M. K. Cheema, and S. Zameer, "Perceptions of Muslim parents and teachers towards sex education in Pakistan," *Sex Educ.*, vol. 21, no. 1, pp. 106–118, 2021, doi: 10.1080/14681811.2020.1753032.

[13] J. Gilbert, "Contesting consent in sex education*," *Sex Educ.*, vol. 18, no. 3, pp. 268–279, 2018, doi: 10.1080/14681811.2017.1393407.

[14] H. Shin, J. M. Lee, and J. Y. Min, "Sexual Knowledge, Sexual Attitudes, and Perceptions and Actualities of Sex Education among Elementary School Parents," *Child Heal. Nurs. Res.*, vol. 25, no. 3, pp. 312–323, Jul. 2019, doi: 10.4094/chnr.2019.25.3.312.

[15] D. S. Levin and A. C. Hammock, "School context and content in Canadian sex education," *Can. J. Hum. Sex.*, vol. 29, no. 3, pp. 323–338, Dec. 2020, doi: 10.3138/cjhs.2019-0046.

[16] J. van der Geugten, B. van Meijel, M. H. G. den Uyl, and N. K. de Vries, "Evaluation of a sexual and reproductive health education programme: Students' knowledge, attitude and behaviour in bolgatanga municipality, Northern Ghana," *Afr. J. Reprod. Health*, vol. 19, no. 3, pp. 126–136, 2015.

[17] M. Murdiningsih, R. Rohaya, S. Hindun, and O. Ocktariyana, "The effect of adolescent reproductive health education on premarital sexual behavior," *Int. J. Public Heal. Sci.*, vol. 9, no. 4, p. 327, Dec. 2020, doi: 10.11591/ijphs.v9i4.20444.

[18] 2 and Hicran Yildiz3 Meltem Kurtuncu,corresponding author1 Latife Utas Akhan,1 İbrahim Murat Tanir, "The Sexual Development and Education of Preschool Children: Knowledge and Opinions from Doctors and Nurses," *springer*, 2015.

[19] N. A. Udoh and C. C. Okoro, "Learning Sexuality from the Media — Insights from a Survey of Nigerian University Adolescents for Sex Education," vol. 2, no. 3, pp. 63–70, 2015.

CHAPTER 17
A COMPREHENSIVE STUDY ON THE ROLE OF PROFESSIONAL BEHAVIOUR FOR CORPORATE SUSTAINABILITY

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ABSTRACT: ***Organizational behavior is the study of adaptive modulation across interpersonal and intergroup boundaries within an enterprise. It is a distinct field that draws inspiration from other academic fields. In this paper, the author discussed that in recent years, both organizational theories and practices have embraced this same idea of corporate sustainability. Whereas the definition of a successful corporation is still up for dispute, many academics concur that adopting corporate social responsibility is the best course of action. The development of the lucrative corporate culture leads to the acceptance of criteria. The result shows that the organizations use different applications of sustainability. The author concludes that the current study specifically assesses what it takes to develop a sustainability focused corporate culture. If businesses have a strong, objective corporate culture, it is feasible that culture may boost a company's competitiveness. This study's future objectives include improving our knowledge of organizational culture and sustainability.***

KEYWORDS: Culture, Corporate,Environmental, Organizational, Sustainability.

1. INTRODUCTION

The corporate culture concept has increased in number in the field of quality management because it permits the use of the domains of human vocations and strategic behavior as interpretations for a business's performance metrics. There are no explanations, however, for what makes a good corporate culture. There are also a few specific guidelines for how businesses should adopt a cultural transformation that is focused on longevity. There has been a lot of discussion on the importance of business procurement practices and the tenets of economic growth. Several businesses have established or changed policies, goods, or procedures recently to cut consumption, combat pollution, and improve stakeholder engagement. The establishment of long-term organizations and firms, on the other hand, is not encouraged by these alterations, according to some scholars, who view them as insufficient because they are fundamentally traditional. They argue that for firms to effectively adjust to environmental legislation, there would need to be a huge political shift. However, organizations must retain organizational culture as a core aspect of economic survival [1]–[3]. Corporate sustainability is a corporate strategy that adds value for all parties involved by emphasizing many aspects of improving quality of life beyond their products and services, such as ethical labor and sourcing, environmentally friendly operations, and socioeconomic wellbeing. The following three factors support business sustainability:

- Economical
- Social
- Environmental

1.1.Economic:

- Maintain truthful compliance and open accounting procedures.
- Invest in a socially conscious manner.
- Risk assessment is crucial concerning each of the three pillars.

- Not prioritizing profit over the other two pillars.

1.2.Environmental:

- The exploitation of natural resources and use of raw materials.
- Carbon balance.
- Restorative farming.
- Pollution and a manufacturer's whole life cycle.

1.3.Social:

- According to the notion of the social explicit contract, there would be negotiated, recorded relationships across people and entities that govern things like conduct, land usage, labor, payment, culture, etc.
- The social justice theory makes sure that when there is justice done but also that socioeconomic disparities are not exploited when it comes to the distribution of goods and services [4].
- Property rights are not superior to human rights, and vice versa.
- The principles of just listening to people's issues, considering them, and taking appropriate action are the foundation of consequentialist philosophy. Figure 1 illustrates the different pillars of sustainability.

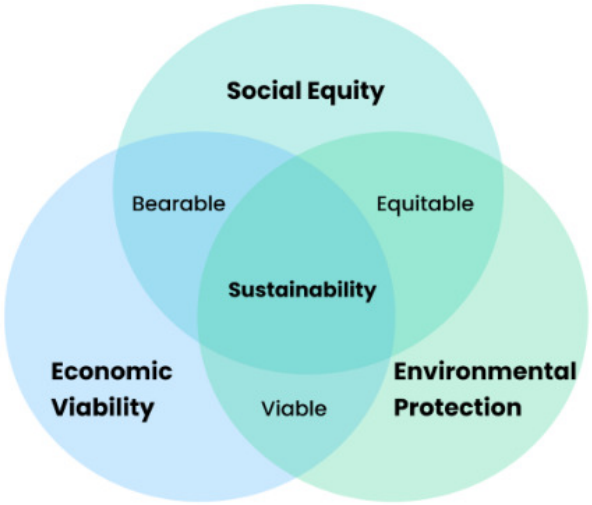

Figure 1: Illustrates the different pillars of sustainability.

Existing unbiased models and theories of cultural evolution have come under scrutiny for depending too heavily on simple equations and not comprehending how transformation takes place. These methods frequently overlook the reality that the executive is always responsible for starting, leading, and overseeing social change. Determining what organizational culture preservation means if businesses can exhibit a unified objective corporate culture, and whether organizations may become considerably more viable by upgrading their traditions are the three main objectives of this study [5], [6].

The current study analyses and investigates the idea of corporate governance to ascertain whether there is a relationship between an existing organizational orientation and its adherence to organizational standards. Despite the subject gaining a lot of attention in recent organizational studies, we believe there is still a lot of uncertainty around how corporate governance practices could be applied within organizations. By illustrating the similarities

between the ideas of green innovation and organizational culture at various levels, the author also establishes the framework for more in-depth research of objective cultural transformation. Figure 2 discloses the sustainability framework of the corporate cycle.

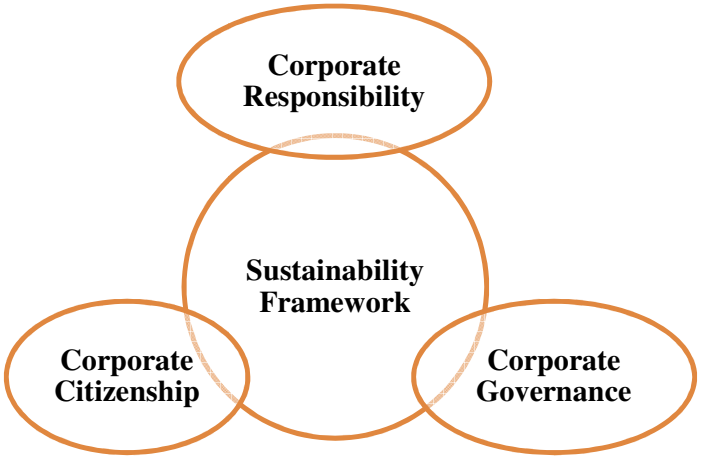

Figure 2: Discloses the sustainability framework of the corporate cycle.

The conflicting demands within an enterprise are represented by the four-cell commercial vehicle finance (CVF) on two distinct and competing axes. Whether anything is within or outside can be determined by the internal-external dimension. The focus of the company is either on its internal operations or the outside world. The control-flexibility combination and the environmental requirements. This component reflects the institution's structural decisions. For efficiency, collaboration, or adaptability. People who place greater emphasis on the administrative side of a continuum are more inclined to use formal approaches. On the other hand, organizations that emphasize flexibility and depend more heavily on social norms end up stressing flexibility and relying less on social norms and other instruments of coordination and integration to assure effective authority, accounting services, and budgeting Internalization of beliefs enables control and coordination. Training, engagement, motivation, socialization, and peer pressure are utilized to achieve desired objectives and activities. Figure 3 illustrates the sustainable communities of the corporate cycle.

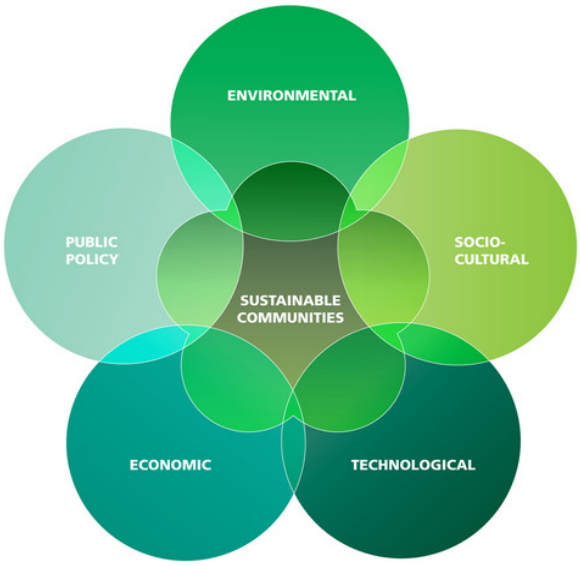

Figure 3: Illustrates the sustainable communities of the corporate cycle.

Linkage values improve teamwork, engagement, and morale among employee's upper left quadrant. Various techniques are used to achieve this. Among them are open education, human resource management, and Organizational rules based on reputation, tradition, and experience. Dedication for a long period to the business Physical Ideals of open systems, which are prevalent in civilizations, put more of an emphasis on recruiting while simultaneously fostering expansion by promoting adaptability, change, and preparation. Informal coordination and collaboration are highlighted due to the diverse and inspirational communication in terms of structure. People are motivated by longitudinal monitoring and administration of the relevance of their job's ideological allure. Organizations frequently have internal cultures that are driven by processes. Consistency is encouraged by the values in the bottom left quadrant [7][8].

Even though the four distinct categories appear to be incompatible and mutually exclusive, they may and often do coexist inside an organization, however, certain values are more important than others. Each of the four quadrants of people, flexibility, stability, and job completion focuses on a different aspect of the firm. The opposing quadrants highlight the necessity for CEOs to balance consistency and adaptability as well as people vs. work achievement, which are crucial problems for every firm. Organizational managers should try to strike a balance between conflicting demands. But prior studies have shown that the majority of organizations create a dominating group that has been identified by this one or more of the aforementioned cultural types [9].

By returning to the traditional notion of workplace culture, this review aims to investigate what attributes constitute a sustainability-oriented culture. As an illustration, a heavy emphasis on process quality values bottom left quadrant may result in a rigid bureaucracy that is resistant to reform initiatives. The adoption of corporate social responsibility (CSR) and sustainability practices is explicitly examined in connection to companies that emphasize a certain organization type, as indicated by one of the four unique culture types identified by the commercial vehicle finance (CVF). In essence, each quadrant, or aspect of the organizational culture, is made up of a set of objectives that should be achieved and a consistent management approach. Through leadership development programs and career training, organizational ideologies (i.e., targeted strategic philosophies anchored in society) are brought into businesses from the institutional framework and affect how people act and think there. Consequently, it is sensible to assume that various company cultures affect how employees view and implement a circular economy [10][11].

2. LITERATURE REVIEW

Pranugrahaning et al. in their study embellish that Ingenuity is a key component of the textile industry's success and is very much a given. The author used a technique in which they claimed that one factor that can increase the inclination for innovation is the business culture. This is because one can ensure that employees embrace and commit to innovation as a fundamental value in the company by influencing their behavior. This makes it a great moment to investigate how organizational culture, innovation, and organizational success are related. This study's objective was to examine the impact of internal control on the internal factors that contributed to organizational efficiency inside a textile industry. The analysis of the data was done quantitatively. The author concludes that the infrastructure team's four key dimensions Results, Processes, and Organizational Partnership were widely acknowledged as being advantageous for the development of innovations as a fundamental outcome. A high level of collectivism and the smallest power distance are indicators of the right corporate culture. Therefore, it seems sensible to draw the inference that the organizational culture

significantly affects the environment for innovation development and business outcomes in the company under investigation [12].

Meuer et al. in their study illustrated that there is a dearth of leadership studies in higher education, notably in India, and command stains have an impact on followers' performance in terms of innovative work behavior. Meuer et al. used a survey technique to collect information from the students who were chosen to validate how the leadership styles of academic president's impact organizational productivity in institutions. The findings highlight the mediating and moderating effects of workplace strategy and demonstrate the statistical analysis that leadership styles have a considerable positive impact on employees' innovative work attitudes. This study's primary objective is to investigate how organizations affect the creative work behaviors of department heads in colleges and universities while taking into consideration the moderated mediating effects of HR procedures and organizational citizenship behavior [13].

Landrum et al. in their study embellish that one of the delays is the most frequent problem in the building industry. This study aims to investigate the relationship between delays and the workplace strategy of a construction company. To gather information about workplace cultures and project completion times, the author used a methodology that involved surveying construction companies in India and the United States. The results of this study show that although "market" culture predominates in construction organizations in India, "clan" culture predominates in construction firms in the United States. The study also discovered that the proportion of delays compared to project length is lower in the United States than in India [14].

This study elaborates on the value of researching organizational behavior. Organizational culture researches how local and social traits affect how individuals or groups interact and collaborate. A company's longevity depends heavily on how people work together, engage, and communicate. The biggest breadth and the most communism are tied to the correct corporate culture. Therefore, it makes sense to assume that the performance of innovative marketing and promotional efforts is significantly influenced by the efficient existing culture.

3. DISCUSSION

The approach to economic profitability and the pervasive disdain for the larger organizational environment set apart the thoughts and beliefs of the established factor quadrant. The output reaches quadrant is associated with scientific business planning, which aims to maximize financial gains through simplified industrial processes. The hierarchical organization, rule enforcement, and regulatory compliance are particularly successful in generally stable environmental conditions, enabling maximum product and service productivity [15]. This sociotechnical model category, which presents non-profits as tools for achieving predetermined goals through formal and organized frameworks to improve organizational performance, also aligns with the continuing thing domain. The emphasis on formalization argues that people have boundaries, both conscious and unconscious, that limit their choices and behaviors as employees inside the firm [16].

The author thinks that to achieve business sustainability, firms with a continuous improvement culture will give priority to economic health, growth, and short-term profits. This interpretation of business strategy is predicated on the notion that a corporation seeks to maximize the output of its goods and services. In hierarchical societies, efficiency is described as the ability of the product, operations, and processes to reduce costs, increase production, and meet economic objectives [17], [18]. Overconsumption of the company's products is required by management to boost sales; any efficiency improvements are not

indicative of a company's consideration of the environment and the social systems in which it operates [19].

Obtaining financial sustainability (i.e., increasing revenues, turnover, and expenditures) is reportedly necessary for a firm to be more adaptable, according to certain research. This growth of corporate sustainability knowledge is the concept's most significant departure from conventional organizational design. Interacting with the natural environment has been found to enhance business performance. Businesses that are primarily driven by financial goals run the danger of missing out on the advantages of sustainability and the associated business prospects. Researchers found that it is still uncommon for novel products, services, and operating models to be implemented via flexibility, learning, and change [20][21]. Figure 4 discloses corporate social responsibility in an effective manner and its factors.

Figure 4: Discloses corporate social responsibility in an effective manner and its factors.

Contrary to the internal environment quadrant, the emotional intelligence quadrant places a strong focus on social engagement, interpersonal relationships, talent retention, and the development of a caring workplace. Organizations with a culture that is similar to one that emphasizes human relationships place a high focus on external agreements. The human relations quadrant, which emphasizes work circumstances, social participation, and group identification, serves as a representation of Barley's perspective on human relations. The quadrant also relates to the classification of closed-natural-systems models, which acknowledges informal arrangements, the need to align divergent and disputed goals, the existence of alternative interests within organizations via objects and arrangements, as well as the necessity to align these goals [22]–[24].

3.1.The Fundamentals of Good Corporate Governance:

- *Transparency:*

Information should be publicly available and readily accessible to individuals who may be impacted by the governance system, as well as the results emerging from them, to be transparent. It should also be delivered in easily intelligible formats and media. The business' overall, environmental, and social accountability stances, as well as its progress and different

perspectives on those principles, should all be fairly and objectively evaluated in the material available by the board.

Resource efficiency suggests that proactive adoption of sustainable measures may have intangible advantages, especially if the goals of the activities are to reduce expenses and improve operational efficiency. Some companies invest in their employees again to generate long-term profits by putting in place the proper human processes that encourage value-adding and creativity [25].

Regarding the relationship between corporate culture and the adoption of sustainable agriculture, the implementation method leads to the aforementioned requirements: that employees throughout the establishment be core members of the same contemporary business environment, and that these technicians have positive beliefs toward corporate sustainability. However, not just in the organizational culture literature but also in the writings on social sustainability, such concepts of uniform current skills have been called into doubt.

- *Participation (Stakeholder Involvement):*

Good governance requires participation from all parties, either explicitly or perhaps through authorized representatives. Participation must be planned and informed, and it must also include self-expression and consideration for the organizations and societies overall best interests. The board should have been in charge of seeing to it that adequate communication occurs between the company, its shareholders, and other important stakeholders. Within the framework of its primary objective, the committee should represent the interests of investors and other significant stakeholders.

3.2.Aspects Of Variation:

In that, it is based on what is typical yet at the core of an organization's departments, the distinctive viewpoint is analogous to the organizational stance. Scholars disagree, nonetheless, on the extent to which several subcultures may continue to exist alongside an organizational consensus. Others contend that many firms should be categorized as global, while some contend that subcultures exist within a wider "common" corporate structure.

Subcultures are real, according to several research. They may develop throughout an entire organization about levels of hierarchy or decision-making, such as how well a department performs or concerning employment or distinctions based on organizational duties, including branch, function, and vocation. Different demographic characteristics including race and ethnicity, social networks, and subculture development may all be influenced by these factors. The differentiation approach offers the following perspectives on the interrelationship underlying workplace culture and corporate sustainability adoption, in contrast to the integration viewpoint: that various subcultures may exist within a corporation, and that those adherents of each subculture have different views regarding corporate sustainability from those of other subcultures.

3.3.Importance To Managers:

To attain organizational resilience, CEOs seem to need to shift away from a purely economic approach and toward a more unified platform of ecologically beneficial ideals. Some opponents, like Hart, contend that for businesses to provide lasting value, they must assess their susceptibility to current and future environmental and social events. Leaders may develop and implement a business culture shift focused on sustainability, claims the integration strategy. Theories that take into account new issues usually highlight a value cascade from higher authorities to various levels of the company in current organizations' cultures. In conclusion, a lot of specialists think senior leadership will generally approve of

business environment principles and practices. The notion that top management values would be automatically transmitted to and shared by all firm employees is contested by the differentiation viewpoint. According to Harris and Crane's research, the existence of several subcultures hinders the spread of a culture that emphasizes sustainability. Another study found institutionalized views and ideologies inside and across organizations, organizational rigidity, and conservatism as barriers to organizational culture development.

While the more obvious aspects of workplace culture may be changed, the core values of the organization are frequently tenacious and challenging to change through administrative management. Executives attempting to embrace sustainability-oriented culture changes may find these outcomes discouraging, but this article offers helpful avenues and real-world applications. The building of an organizational climate that supports business sustainability is essential, according to the study. It has been demonstrated that talking about corporate green activities, such as publishing a circular economy policy and incorporating sustainability evaluation criteria into employee evaluation, is a critical component in deciding how organizational actors see corporate sustainability. Alternatively, being aware of corporate values may aid in the development

4. CONCLUSION

In this paper, the subject of business sustainability and its connection to corporate culture have been explored in more detail. The CVF has developed a framework for comprehending how the underlying cultural underpinnings of western workplaces influence how measurements and findings are carried out and the potential outcomes. People from different cultures place different specific emphasis on aspects of business continuity, such as internal corporate progress, waste reduction, resource preservation, or stakeholder satisfaction. Second, we sought to determine if businesses could exhibit a unified corporate culture that prioritizes sustainability. The idea that organizations always have a single leadership and that people share socially transmitted beliefs, values, and attitudes are both challenged by the heterogeneity approach. The heterogeneity perspective contends that distinct subcultures might exist inside an organization and that employees of one subculture might have different views on corporate strategy than those of employees of another subculture.

The author explored if changing an organization's culture may make it even more sustainable. This report recognized organizational rigidity and the spread of organizational subcultures across the firm as the main challenges and barriers to long-term cultural progress. On the other hand, ideas on social sustainability principles might happen at different levels. Following our paper, physical level advancements, such as the dissemination of corporate governance publications, the incorporation of evaluation techniques into assertion, or employee training, would foster an environment that would allow for changes in employees' beliefs and morals, or even fundamental inferences. The author suggests numerous avenues and options for further investigation. It will be necessary to look at the suggested connections between workplace strategy and the long-term profitability of the firm. Companies must abandon the dominant design and assumptions of the traditional organization. Several academics have made similar claims in different studies. Studies targeted at unraveling the nuanced relationships between organizational behavior and corporate sustainability will likely be in high demand in the nation, in our opinion.

REFERENCES

[1] D. Arditi, S. Nayak, and A. Damci, “Effect of organizational culture on delay in construction,” *Int. J. Proj. Manag.*, 2017, doi: 10.1016/j.ijproman.2016.10.018.

[2] F. A. Yusuf, “The effect of organizational culture on lecturers’ organizational commitment in private universities in indonesia,” *Int. J. High. Educ.*, 2020, doi: 10.5430/ijhe.v9n2p16.

[3] N. Janićijević, "The mutual impact of organizational culture and structure," *Econ. Ann.*, 2013, doi: 10.2298/EKA1398035J.

[4] A. Meha, "Customer relationship management," *Qual. - Access to Success*, 2021, doi: 10.48175/ijarsct-2601.

[5] J. F. Molina-Azorin, M. D. López-Gamero, J. J. Tarí, J. Pereira-Moliner, and E. M. Pertusa-Ortega, "Environmental Management, Human Resource Management and Green Human Resource Management: A Literature Review," *Adm. Sci.*, vol. 11, no. 2, p. 48, May 2021, doi: 10.3390/admsci11020048.

[6] M. Drakic-Grgur, "Financial Management," in *Studies in Health Technology and Informatics*, 2020. doi: 10.3233/SHTI200667.

[7] V. Dhingra, R. K. Mudgal, and M. Dhingra, "Safe and Healthy Work Environment: A Study of Artisans of Indian Metalware Handicraft Industry," *Manag. Labour Stud.*, 2017, doi: 10.1177/0258042X17714071.

[8] J. K. Tuffour, D. Akuffo, A. A. Kofi, P. A. Frimpong, and T. Sasu, "Adoption of Mobile Commerce and Service in Adentan Municipality of Ghana: An Examination of Factors Influencing Small Enterprises," *Int. Bus. Res.*, 2018, doi: 10.5539/ibr.v11n11p109.

[9] S. Jain, V. Jain, and S. Das, "Relationship analysis between emotional intelligence and service quality with special evidences from Indian banking sector," *Espacios*, 2018.

[10] G. Khan, K. K. Gola, and M. Dhingra, "Multihop vector based routing for void avoidance in UWSN-A linear programming approach," *Int. J. Sci. Technol. Res.*, 2019.

[11] M. Rahul, N. Kohli, R. Agarwal, and S. Mishra, "Facial expression recognition using geometric features and modified hidden Markov model," *Int. J. Grid Util. Comput.*, 2019, doi: 10.1504/IJGUC.2019.102018.

[12] A. Pranugrahaning, J. D. Donovan, C. Topple, and E. K. Masli, "Corporate sustainability assessments: A systematic literature review and conceptual framework," *Journal of Cleaner Production*. 2021. doi: 10.1016/j.jclepro.2021.126385.

[13] J. Meuer, J. Koelbel, and V. H. Hoffmann, "On the Nature of Corporate Sustainability," *Organ. Environ.*, 2020, doi: 10.1177/1086026619850180.

[14] N. E. Landrum and B. Ohsowski, "Identifying Worldviews on Corporate Sustainability: A Content Analysis of Corporate Sustainability Reports," *Bus. Strateg. Environ.*, 2018, doi: 10.1002/bse.1989.

[15] P. Boselie, J. Van Harten, and M. Veld, "A human resource management review on public management and public administration research: stop right there…before we go any further…," *Public Manag. Rev.*, 2021, doi: 10.1080/14719037.2019.1695880.

[16] S. M. Mian and R. Kumar, "Review on Intend Adaptive Algorithms for Time Critical Applications in Underwater Wireless Sensor Auditory and Multipath Network," 2019. doi: 10.1109/ICACTM.2019.8776782.

[17] G. Kovacs and N. Sowers, "Airway Management in Trauma," *Emerg. Med. Clin. North Am.*, vol. 36, no. 1, pp. 61–84, Feb. 2018, doi: 10.1016/j.emc.2017.08.006.

[18] R. Wolniak, "Main functions of operation management," *Prod. Eng. Arch.*, vol. 26, no. 1, pp. 11–14, Mar. 2020, doi: 10.30657/pea.2020.26.03.

[19] N. Agrawal, A. Jain, and A. Agarwal, "Simulation of network on chip for 3D router architecture," *Int. J. Recent Technol. Eng.*, 2019.

[20] K. K. Gola, B. Gupta, and G. Khan, "Underwater sensor networks: A heuristic approach for void avoidance and selection of best forwarder," *Int. J. Sci. Technol. Res.*, 2019.

[21] V. Jain, S. Arya, and R. Gupta, "An experimental evaluation of e-commerce in supply chain management among indian online pharmacy companies," *Int. J. Recent Technol. Eng.*, 2019, doi: 10.35940/ijrte.C1092.1083S19.

[22] S. Tyagi, R. K. Dwivedi, and A. K. Saxena, "A novel data hiding tool based on pvd: Steganopixtrans," *Int. J. Sci. Technol. Res.*, 2019.

[23] G. Bathla, L. Pawar, G. Khan, and R. Bajaj, "Effect on lifetime of routing protocols by means of different connectivity schemes," *Int. J. Sci. Technol. Res.*, 2019.

[24] M. Hatim, F. Siddiqui, and R. Kumar, "Addressing challenges and demands of intelligent seasonal rainfall forecasting using artificial intelligence approach," 2020. doi: 10.1109/ICCAKM46823.2020.9051516.

[25] A. Gupta, R. Kumar, and M. K. Tiwari, "Taxonomy of Link Based web Spammers using Mining Optimized PageRank Algorithm for e-Governance," 2020. doi: 10.1109/ICIEM48762.2020.9160317.

CHAPTER 18
AN EMPIRICAL STUDY ON CHALLENGES FACED BY HIGHER EDUCATION IN INDIA DURING COVID-19 PANDEMIC

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ABSTRACT:The COVID-19 pandemic has caused widespread disruption across the world's academic institutions of higher learning. As a direct consequence of this, the existing structure of higher education in India has been subjected to scrutiny. COVID-19 pandemic is sweeping the country and the majority of the nation's higher education institutions, including universities and colleges, have started instructing their students via the use of online platforms. This research investigates the ability of a country and its teaching culture to persevere throughout the process of education at universities and colleges by using online tools for distance learning. The study also investigates the challenges that are faced along the route. In addition, this research investigates the several digital platforms that are now in use and discusses the issues and challenges that are faced by both instructors and students when participating in online classes. Despite all of the challenges, the country was able to make significant headway in meeting the demand for online education among students enrolled in higher education. It was hypothesized that technically competent professionals would be required shortly to improve the efficiency of online instruction.

KEYWORDS:COVID-19, Learning, Higher Education, Online Platforms, Teaching, Pandemic.

INTRODUCTION

Higher education in India is provided through a variety of universities, colleges, and other independent institutions, all of which are home to tens of millions of students. Since independence, the nation's higher education system has developed tremendously throughout the country, notably in the post-independence era, and has quietly evolved into the world's biggest system of its kind. This rapid expansion is often hampered by financial and managerial drawbacks, such as access, equitable as well as importance; reorienting programs to emphasize health awareness, values and morals, and quality of education including the evaluation of organizations as well as their certification; and rethinking the role of institutions in society [1].

The World Health Organization (WHO) recommended that social isolation be maintained as the first step in preventing the spread of the coronavirus pandemic. As a result, countries throughout the world implemented a state of emergency to keep the infected population apart. Schools, colleges, and universities were all forced to shut down as a result of the government shutdown. Indefinite suspension of classes and postponement of all examinations in schools, colleges, and universities, including admission exams. As a result, every student's timetable was ruined by the lockdown. Although this is a one-of-a-kind instance in educational history, the advent of COVID- 19 has opened the door to a new age of digital learning [2].

A combination of social isolation and top-notch medical treatment is urgently required. An all-out lockdown is taking place all around the globe, and India is no exception. Around 368 million individuals have been infected by the virus, and 258 thousand people have died as a result of the illness. As a result, all businesses and sectors have been shut down, including educational institutions. As a result of the closure of educational institutions, students and teachers alike have expressed their concerns. The teaching profession, on the other hand, has embraced new approaches to engaging pupils and imparting knowledge [3]–[6].

1.1.An Overview of E-Origins Learnings and Importance:

According to Figure 1, the teaching community has embraced the use of a wide variety of electronic teaching or electronic learning applications, including Google classroom, Zoom, Easy Class, Go to Meeting, Remind, Slack, and a great number of others. This is done to reach as many students as is humanly possible. Now the more difficult task was to choose an application among the vast number of apps that are now accessible on the internet that would meet the requirements of everyone, including minimal data consumption and improved reliability during live broadcasting.

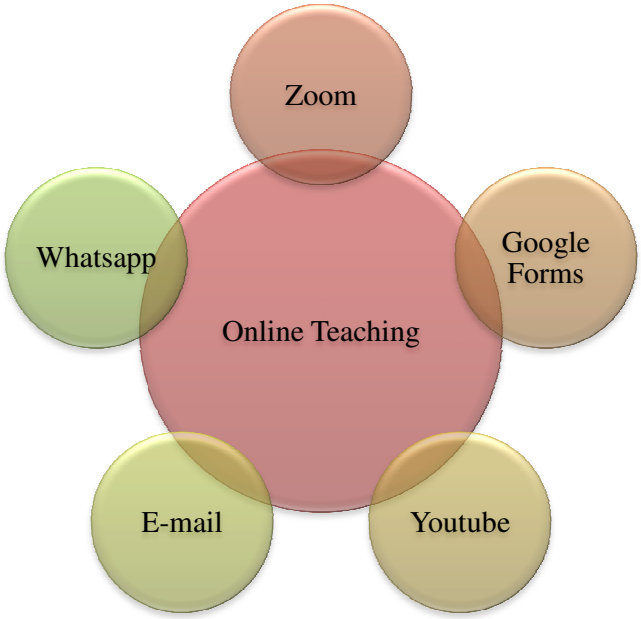

Figure 1: Displays the There are many different online platforms accessible for education.

The data shown in the previous figure makes it abundantly evident that we have access to a wide variety of internet resources. The Zoom app has been utilized for live streaming, conferences, and lecture series.Furthermore, the Easy Class app and also the Google Classroom app is used to distribute assignments to pupils. Various apps have been utilized for the instruction of students for the various purposes listed above.PPTs were published to the web portal slide sharing, to make them accessible to students who are unable to participate in online classrooms. This will allow students to download the PPTs whenever they have access to the internet, and any questions or concerns can be addressed via phone calls.

Students have access to virtual laboratories thanks to the efforts of some educational institutions and other organizations, which make it possible for them to get practical laboratory experience.To take advantage of Tata Steel's online training opportunities, all you need to do is visit www.capabilitydevelopment.org, fill out a brief application, and pay a one rupee cost. This was done with the lockdown's monetary issue in mind. In this era, several institutions have offered students free access to online learning opportunities. They provide close to 27 different classes.There are numerous of them, but here are a few examples: Advanced Microsoft Excel, Fundamental Metallurgy, Fundamental Total Quality Management, Bearings, Machine Learning, Industry 4.0, MS Office, Basic PLCs, Induction Motor, and Transformer. As a result of what has been observed, the courses that are provided don't just focus on a single subfield of engineering; rather, they cover all of the subfields of

engineering, including Computer Science, Communications Engineering, Mechanical, Information Science, Instrumentation, and Technology [7].

2. LITERATURE REVIEW

Kunal Chaturvedi et al. stated in their study that the confinement caused irritation, tension, and melancholy. We surveyed 1182 studentsfrom a variety of educational institutes in India's Delhi-National Capital Region (NCR),to assess the impact of the pandemic on their lives The research looked into how COVID-19 affected students of different ages in the areas of time spent online classes and self-study, learning medium, sleeping habits, weekly exercise regime, weight, social events, and mental wellbeing.The study indicated that individuals used coping methods and sought aid from loved ones to manage stress and anxiety. The study also compared student activity on social media by age. This research proposes that public authorities could mitigate the negative effects of the COVID-19 epidemic to improve learning [8].

T. Gonzalez et al. conducted a study that this research examines COVID-19's influence on college students' independent learning. We analyze disparities in evaluations bydividing 458 students from three courses at Madrid's Universidad Autonoma (Spain) into 2 categories.The first (control) group includes 2017-2018 and 2018-2019. The second (experimental) group consists of 2019-2020 students whose face-to-face activities have been suspended. Results demonstrate COVID-19 imprisonment improves student achievement.Analysis of pupils' learning techniques before incarceration showed they didn't study continuously. We find that COVID-19 imprisonment modified students' learning practices, enhancing their efficiency. COVID-19 confinement is supposed to boost kids' learning and performance, resulting in higher test results [9].

Vidyut Rajhans et al. discussed in their study that this research focuses on optometry education reform's enabling and inhibiting aspects. It examines how the Indian optometrist education system handled COVID-19 disruptions to data from the 2020 poll. Cross-sectional research was designed to react to changes in optometry training and adaptations made by Indian instructors during COVID-19. In April 2020, an online survey was conducted using a questionnaire approach with open- and closed-ended questions based on the fact that most optometry institutes had changed to e-learning. 73 of 78 optometry educators (93.58%) are confident in using e-learning. Video conferencing, education websites, and applications for social media are used in the majority of teaching-learning and assessment activities. The COVID-19 outbreak presents an opportunity to overhaul the existing classroom-based schooling system. Quick switches to online applications aided in keeping optometry education programs running throughout the academic year. The rapid use of online education has benefited both optometrist trainees and practicing optometrists [10].

3. DISCUSSION

A total of 10 million instructional hours would be lost across all institutions as a result of the Novel Coronavirus shutdown, which would last 40 days in the first and second phases. The University Grants Commission has issued a bit of advice urging all institutions to continue online courses as feasible and to embrace Information and communication technology (ICT) tools for scholarly dialogue. The university's and colleges' faculty members are also urged by the advisory committee to utilize the different online platforms to connect with students [11].Many freely accessible technologies are sure to assist in this endeavor, and many institutions and colleges currently utilize them to connect to students in distant places. Many departments at Guwahati University in Assam, for example, employ a variety of online

resources, such as Skype for live classrooms, YouTube for recorded lectures, NPTEL for pre-made lectures, Google Classroom for lectures, and, Zoom, Easy Class for live lessons online.

3.1.Obstacles and Possibilities:

Across the third week of March 2020, the severity of the COVID-19 outbreak in the nation was recognized. For two weeks beginning on March 16, 2020, all schools, colleges, and institutions were closed as a precaution. On March 22, 2020, the nation was placed under a mandatory curfew (JANTA CURFEW). On March 25, 2020, a three-week lockdown was enforced on the country, and schools were shuttered for good. During and after the lockdown, universities and colleges were concerned about students' ability to continue their education [12].Both the University Grants Commission and the Government of India have given directives to universities and colleges to help them navigate this problem. The vast majority of educational institutions began offering online programs without having any previous experience or the required infrastructure. The major goal was to engage pupils in online conversation. It was a challenge to settle on a single digital medium for this exchange.

The design and execution of online instruction are substantially different from traditional education in both principle and practice. The development of a useful online course often takes many weeks. An efficient approach to online education must begin with the formulation of a well-thought-out growth strategy. In addition, there is a need for the development of a distinct ecosystem as well as a "student support system" for online teaching and learning. It is neither practicable nor practical to complete one's whole education online; thus, traditional classroom instruction may be supplemented with online learning opportunities. Face-to-face education, on the other hand, may make use of a wide variety of teaching methods, while the design of online education can include many other aspects [13].

It was the first difficulty to determine whether or not the student had an Internet connection. Students from rural and impoverished regions are especially encouraged to apply. Students' smartphones with 4G capabilities were required for live streaming of the lectures. The second difficulty was to ensure that the live stream would not buffer or delay if the Internet speed was insufficient to support the encoder's bandwidth or if the server was overloaded, causing the program to collapse. This might happen even in metropolitan areas with poor internet connections. Third, while technical education is more hands-on than general education, live streaming tends to concentrate on delivering information solely in theory.

The students would have to leave their hostels and PGs directly due to the lockdown, and they were unable to bring their textbooks and computers with them, therefore they were unable to participate in e-learning. Concerned about whether or not they would be granted an extension for the current semester, students in their last year are anxiously waiting to find out. Students who want to study abroad and return to India for their post-secondary studies are concerned that this lockout might result in a one-year delay.In light of the lockdown, numerous educational institutions have been forced to cancel their lessons, tests, internships, and so on, and instead, use online alternatives. This unforeseen emergency necessitated the closure of all instructional activities, which left teachers and students perplexed and unsure of how to proceed. After the lockdown was over, everyone recognized how much it had taught them about how to deal with pandemics in the future.

Students nowadays are used to studying in groups and highly respect the opinions of their peers. Students in India's optometry program are in their early twenties, having just graduated from high school. As a result, the majority of them are utterly reliant on their families for all aspects of their financial and emotional well-being while they are still in school. As a result, instructors doubt that students will take responsibility for their education. They have also

been forced to deal with the difficulties of studying alone because of the lockdown. As a result, making the switch to e-learning is going to be difficult [14].

3.2.Education has benefited through COVID-19:

There have been negative repercussions of the pandemic on education, but educational institutions in India are embracing the challenges and trying their best to provide students with continuous service. As a result, the educational system in India has had the chance to evolve from a more traditional one into one fit for the modern day. The following are some good effects that may be regarded:

- Blended-Learning:The implementation of digital tools has been furthered thanks to COVID-19. Blended learning has become more common in educational institutions. It pushed all educators and students to improve their technological proficiency. There have never been so many possibilities for curriculum and pedagogy to be transformed as there have been with the advent of new delivery and evaluation methods. In addition, it provides access to a huge number of students at once.
- Increase in the use of Learning Management Systems (LMS). Learning management system adoption in academic institutions has been more popular in recent years. It presented a significant chance for businesses that have been working on the development and improvement of learning analytics for higher education institutions to capitalize on this opening [15].
- In a lockdown scenario, students were unable to acquire hard copies of study materials; as a result, the majority of students resorted to using soft copies of materials for reference purposes. This highlights the need to increase the usage of digital versions of educational resources.
- Work done in collaboration has improved, and there is now the potential for new modes of collaborative teaching and learning to emerge as a result of this development. Collaborations among professors and educators from different countries may also take place for learning from one another.
- The students can readily exchange learning materials with one another, andE-mail, SMS, phone calls, and other social media platforms like Facebook or WhatsApp are used to respond to pertinent inquiries. Moreover, the use of electronic media for the dissemination of information has been enhanced.
- Exposure to the world at large: both educators and students are gaining possibilities to communicate with their contemporaries located in other countries. Learners adapted to a community with members from all over the world and those who participate in online education during a pandemic can more effectively manage their time than students who attend traditional schools.
- Open and distance learning is in high demand (ODL): The majority of students opted for ODL during the epidemic because it encourages self-learning, gives students access to a range of materials, and can be adapted to meet the specific needs of each student.

Rather than only serving as a resource for students, the lockdown has also provided a larger platform for academic institutions to provide a wide range of certificate programs. Faculty members may make use of several organizations and online platforms that provide professional development opportunities. AICTE Training and Learning (ATAL), the National Programme on Technology Enhanced Learning (NPTEL), and massive open online courses

(MOOCs) are all offering faculty development programs during this period (MOOC). Faculty may benefit greatly from the two-week-long online Faculty Development Courses provided by various IITs. As a result of the many IITs online courses, teachers have been able to update their skills and knowledge, and a productive mechanism for sharing this information has been developed [16].

3.3.COVID-19 negative impact on education:

The COVID-19 epidemic has had significant ramifications for the educational sector. It has had several detrimental effects on education, including the following:

- Classes have been halted and examinations at various levels have been postponed because of the disruption. Annual exams and entrance exams have already been postponed by some different boards. Participants were held back from the program. Due to the lockdown, children will miss almost three months of the 2020-21 school year. This will exacerbate the problem of academic consistency and make it harder for kids to get back into the swing of things after such a lengthy absence.
- Due to COVID-19, the majority of hiring was put on hold. With employers postponing the onboarding of students, student placements may also be hampered. This pandemic is likely to negative impact on the unemployment rate. Because of the present circumstances, there is no recruiting in the government sector in India, and recent graduates are afraid that their employer offers from private sector employers may be withdrawn. The jobless rate in India, according to the Centre for Monitoring Indian Economy, has risen from 8.4% in mid-March to 23% in early April, with the urban unemployment rate reaching 30.9 percent. People's focus shifts away from schooling and toward finding work, as unemployment rises.
- Teachers and students who aren't ready for online learning Some instructors and students were not prepared to make the moveconcurrently, face-to-face training is being replaced by online learning. Unless they have their online learning platform, most lecturers are simply using video platforms like Zoom, Google Meet, and the like to deliver lessons.
- COVID-19 may negative impact on global employment opportunities, with some losing their jobs in other nations and students graduating from Indian universities being unable to find work outside of India. Due to COVID-19, a large number of Indians may have been forced to return home after losing their employment abroad. As a result, new graduates who are about to join the workforce may have a tough time finding a job.Lockdown may prevent many students who have already landed employment as a result of campus interviews from reporting to work. Indians who have been working overseas may be forced to return home. In the present pandemic scenario, recent graduates in India are especially concerned about losing out on employment offers from business sectors due to restrictions on transportation.
- Parents increased responsibility for the education of their children: Some parents are educated enough to lead their children, while others may lack the knowledge required to teach children at home.
- Mid-day meals, a government-sponsored school meal program in India, is aimed to improve the nutritional intake of school-aged children throughout the country. Because school lunch programs have been suspended, pupils will be unable to have their daily nutritional needs met as a result of the closures. Mid-day meals also have a

significant impact on increasing school enrollment, as per several kinds of research conducted.

- Due to the wide disparity in the availability of internet connections, computers, and laptops, students may not be able to fully benefit from online teaching and learning, which may result in a digital gap. In India, the lockdown has had a devastating effect on low-income kids, according to several accounts.As a consequence, during pandemics, the usage of online learning has increased. COVID-19 might worsen the gap between urban and rural people.
- In terms of higher education, the pandemic has had a huge impact. Many Indian students studying abroad,people are abandoning their homes, especially in the worst-affected countries, and if this trend continues, the proportion of Indian students studying abroad would drop significantly.
- There are serious challenges that must be addressed by the government and other stakeholders for distance learning methodologies to be widely adopted.The accessibility and availability of internet-connected electronic devices, the need for safe learning environments, the enhancement of educator, family, and student abilities to use and navigate digital devices, and the development of participating teaching materials for students with disabilities or from other marginalized communities are all examples of such problems.

Current teaching personnel is resentful of course redesign, which is a significant barrier to online education deployment. This is largely because most of them are unfamiliar with technology and find it difficult to adapt to new ways of doing things. After the training, they might have used the time to create online courses. They may be able to deliver an excellent online education if they have the proper training and time to adapt to the new technology. There is no growth in higher education in the nation until everyone steps forward. All educational institutions and people must be prepared for a future in which education will no longer be the same. Blended or mixed learning should be the norm rather than the exception [17].

Faculty members are the university's greatest asset when it comes to disseminating information to interested parties, thus they must have the resources and training necessary to do so. Faculty members and students will both benefit from a teaching-learning paradigm that incorporates both teaching and learning. Institutions must also spread the word about the benefits of online learning. To improve online education, they'll need to build the necessary technology infrastructure and hire the right people. This is also a chance to educate current teachers to use the most up-to-date technology and to create institutions that are technologically capable of boosting future digital learning [18].

4. CONCLUSION

The breakout of COVID-19 has had an impact on many industries, and as a result, many of these fields need to establish new standards to make development in the years to come. One of the industries that have been hit the worst is the one dealing with higher education.The field of education in India has been significantly influenced as a result of COVID-19. Even though it has resulted in a great number of difficulties, a great number of possibilities have also emerged.To combat the effects of COVID-19, the Indian government and other stakeholders in education have explored the potential of open and distance learning (ODL) through the utilization of several different forms of digital education technology.

The future of higher education in the nation will be significantly impacted by the choices that are made during this epidemic time. If we adopt the appropriate measures, the educational system will become more effective, and the nation as a whole will make advancements.To effectively provide education, the policies of India need to incorporate a variety of people hailing from a variety of different backgrounds, such as distant areas, marginalized groups, and minority populations. After the lockout, students should be allowed to continue their online practice since it is providing them with significant benefits. It is possible to do further extensive statistical research to investigate the effects of COVID-19 on the education system in India.

REFERENCES

[1] C. P. Kaushal, "Impact of COVID-19 on Higher Education in India: Lessons Learned and Mitigation Measures," *J. Nature, Sci. Technol.*, vol. 1, no. 1, pp. 10–13, 2021, doi: 10.36937/janset.2021.001.002.

[2] S. Singh, D. Roy, K. Sinha, S. Parveen, G. Sharma, and G. Joshi, "Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations," *Psychiatry Res.*, vol. 293, p. 113429, Nov. 2020, doi: 10.1016/j.psychres.2020.113429.

[3] M. P. Kantipudi, C. John Moses, R. K. Aluvalu, and G. T. Goud, "Impact of Covid-19 on Indian Higher Education," *Libr. Philos. Pract.*, vol. 2021, 2021.

[4] G. K. Upadhyaya, V. K. Jain, K. P. Iyengar, M. K. Patralekh, and A. Vaish, "Impact of COVID-19 on post-graduate orthopaedic training in Delhi-NCR," *J. Clin. Orthop. Trauma*, vol. 11, pp. S687–S695, 2020, doi: 10.1016/j.jcot.2020.07.018.

[5] K. V. Elumalai *et al.*, "Factors Affecting The Quality Of E-Learning During The Covid-19 Pandemic From The Perspective Of Higher Education Students," *J. Inf. Technol. Educ. Res.*, vol. 19, pp. 731–753, 2019, doi: 10.28945/4628.

[6] A. Sharma and I. Alvi, "Evaluating pre and post COVID 19 learning: An empirical study of learners' perception in higher education," *Educ. Inf. Technol.*, 2021, doi: 10.1007/s10639-021-10521-3.

[7] M. J. Fleener, "A Social Inquiry Analysis of Post-Pandemic Higher Education: A Futures Perspective," *J. High. Educ. Theory Pract.*, vol. 21, no. 10, Sep. 2021, doi: 10.33423/jhetp.v21i10.4622.

[8] K. Chaturvedi, D. K. Vishwakarma, and N. Singh, "COVID-19 and its impact on education, social life and mental health of students: A survey," *Child. Youth Serv. Rev.*, vol. 121, p. 105866, Feb. 2021, doi: 10.1016/j.childyouth.2020.105866.

[9] T. Gonzalez *et al.*, "Influence of COVID-19 confinement on students' performance in higher education," *PLoS One*, vol. 15, no. 10, p. e0239490, Oct. 2020, doi: 10.1371/journal.pone.0239490.

[10] V. Rajhans, U. Memon, V. Patil, and A. Goyal, "Impact of COVID-19 on academic activities and way forward in Indian Optometry," *J. Optom.*, vol. 13, no. 4, pp. 216–226, Oct. 2020, doi: 10.1016/j.optom.2020.06.002.

[11] M. K. Srivastava, "Higher Education in India in context of Pandemic - Covid 19," *Int. J. Res. Appl. Sci. Eng. Technol.*, vol. 9, no. 10, pp. 733–734, Oct. 2021, doi: 10.22214/ijraset.2021.38499.

[12] N. Asadi Faezi *et al.*, "Peoples' attitude toward COVID-19 vaccine, acceptance, and social trust among African and Middle East countries," *Heal. Promot. Perspect.*, vol. 11, no. 2, pp. 171–178, May 2021, doi: 10.34172/hpp.2021.21.

[13] L. S. Schlesselman, "Perspective from a Teaching and Learning Center During Emergency Remote Teaching," *Am. J. Pharm. Educ.*, vol. 84, no. 8, p. ajpe8142, Aug. 2020, doi: 10.5688/ajpe8142.

[14] C. DiLullo, P. McGee, and R. M. Kriebel, "Demystifying the Millennial student: A reassessment in measures of character and engagement in professional education," *Anat. Sci. Educ.*, vol. 4, no. 4, pp. 214–226, Jul. 2011, doi: 10.1002/ase.240.

[15] M. L.M., B. R., and P. S. Aithal, "Impact of COVID-19 on Redefining the Services of Educational Institutions using Ubiquitous Technology," *Int. J. Manag. Technol. Soc. Sci.*, pp. 266–282, Nov. 2020, doi: 10.47992/IJMTS.2581.6012.0118.

[16] P. Somani, "Economic Implications Before and After the Covid-19 Pandemic Progressing Towards a 'New Normal,'" *Int. J. Soc. Sci. Econ. Invent.*, vol. 7, no. 03, Mar. 2021, doi: 10.23958/ijssei/vol07-i03/277.

[17] M. C. Beaton, G. N. Codina, and J. C. Wharton, "Decommissioning normal: COVID-19 as a disruptor of school norms for young people with learning disabilities," *Br. J. Learn. Disabil.*, vol. 49, no. 4, pp. 393–402, Dec. 2021, doi: 10.1111/bld.12399.

[18] M.-H. Lin, H. Chen, and K.-S. Liu, "A Study of the Effects of Digital Learning on Learning Motivation and Learning Outcome," *EURASIA J. Math. Sci. Technol. Educ.*, vol. 13, no. 7, Jun. 2017, doi: 10.12973/eurasia.2017.00744a.

CHAPTER 19
AN ANALYTICAL STUDY ON THE SIGNIFICANCE OF TECHNOLOGY IN MODERN-DAY EDUCATION SYSTEM

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ABSTRACT: ***The 21st century is undoubtedly the technological age, and every aspect of life has been transformed by technology. It is the source of all cultures as well as arts and sciences. People now live in a very different world because of technology. It has changed many aspects of life and changed the meaning of living. Undoubtedly technology has a significant impact on all aspects of life, and many manual processes can be automated. Even many difficult and important activities can be accomplished more easily and effectively with the help of contemporary technology. The use of technology has greatly improved the way people live. Technology has changed education, and one cannot overstate the importance of technology in the classroom. Indeed, with the addition of computers in the classroom, it has become easier for both teachers and students to impart knowledge. The joy of learning and teaching has improved as a result of the use of technology. The main objective of this paper is to know more about the importance of technology in the modern education system. In the future, through this paper, people will be aware of the importance of technology in the current education system.***

KEYWORDS: ***Digital, Education System, Learning, Student, Technology.***

1. INTRODUCTION

Many people believe that the 21st century is a technological age. Technology plays an important role in our daily life today. It is recognized as the cornerstone of economic development. An economy lacking technology cannot grow in the current environment. It is a result of how much technology has accelerated and simplified our work. Technology has the potential to make an impact on any field of study, and education is one of them [1], [2].

1.1. Modern Educational Technologies:

The usage of contemporary equipment and tools improves students' learning and engagement, according to most previous studies on how modern students utilize technology today and the way that use affects their learning. They find it more beautiful and full of intriguing areas when technology is employed to help. Knowledge sharing becomes incredibly simple, beneficial, and effective. This indicates that, in several spheres of life, including education, contemporary technology is enabling us to make our brains function more quickly than ever before. In today's culture, whether it be in school, university, as well as college, the dependence and dependence on this sort of growth, which simply makes life an easy, smooth trip, is entirely inescapable. The following are some ways that employing technology might help modern students [3].

1.1.1. Continuous Connectivity or Internet Access:

The importance of the Internet has grown tremendously during the last 10 years. At this time, it is impossible to overestimate its importance in the field of education. The Internet is a blessing for students despite the possibility of fraud or even other issues. Today, practically everything individuals use includes the Internet. Almost everywhere we now have internet access, including on our phones, gaming systems, and television (TV). Students may find the

Internet incredibly useful for study and academic success, as well as for tutorials, support materials, and other tools [4], [5].

1.1.2. Using Images and Projectors:

Visual pictures are always more appealing than written words. Projectors or scenes used to aid learning are yet another great technological use. Today the best PowerPoint presentations are used in top colleges around the world to keep learning alive and interesting [6]. One piece of technology that can be used in schools and colleges to promote participation, enthusiasm, and motivation is the projector. Instead of simply reading the text, students select engaging images and material that stimulate free thought. In the framework of technology, the educational process also becomes highly successful. If people talk about both digital as well as education, people can observe that there is a growth in the usage of digital media in the educational field. This penetration has led to continued engagement with students and the provision of a range of employment or services at various places. Applications to enhance kids' growth and learning will grow as digital technology becomes more potent [7].

1.1.3. Online Education using Technology:

The availability of online degrees is presently pretty common. People are interested in enrolling in distance learning for learning as well as certification. Top universities provide a wonderful online curriculum using a range of resources and the internet. This concept will acquire more traction as it becomes more widely accepted and recognized. Online degree opportunities are becoming prevalent globally for students who are employed and want flexible learning options [8].

1.1.4. Importance of Technology in Education:

Technology may be utilized in education for four different purposes: as a curricular element, a method of delivering instruction, an educational aid, as well as a tool to improve the whole learning process. Technology has transformed education from being passive as well as reactive to being proactive and competitive. Education is crucial in both the classroom and the workplace. In the former, staff members are assisted in changing their prior conduct through education or training. The purpose of subsequent training is to arouse the curiosity of the students. Technology can enhance how effectively students understand and retain knowledge in both scenarios.

1.2. Information and Communication Technology (ICT's) Effect on Education:

“Information and communication technology” (ICT) may improve education quality and relevance while also extending access to it. ICT significantly affects education in terms of instructors' or students' knowledge acquisition or assimilation:

1.2.1. Active Learning:

Exam data can be calculated, analyzed, and computerized. Student performance reports can also be computerized and made easily available thanks to ICT technology. ICT promotes learner engagement because, as opposed to engaging in memorizing or rote learning, students can choose what to learn at their own pace or take on challenges from a real-world setting. Despite the geographical separation between students and teachers, ICT promotes collaborative learning. In addition, it offers students the possibility to collaborate with individuals from diverse cultures as well as work in teams, which enhances students' communication skills and global awareness. Researchers have shown that utilizing ICT often fosters more engaging relationships between teachers and students as well as increased student collaboration both in and out of the classroom. ICT supports modifying already-

existing information and creating new knowledge to provide a tangible good or to further a particular educational goal [9], [10].

1.2.2. Integrative Learning:

ICT promotes an integrated approach to education and instruction by eliminating the artificial boundary between practical and theoretical, in contrast to a normal classroom where the focus is concentrated on only one area.

1.2.3. Learning Evaluation:

ICT for Education focuses on the learner and provides useful feedback through a range of interactive components. ICT enables students to research and learn using state-of-the-art teaching and learning techniques, backed by constructionist learning theory, as opposed to memorization and rote learning.

1.3. Positive Impact:

1.3.1. Improved Teaching and Learning:

- Teachers may now benefit from technical advances like digital cameras, laptops, projectors, PowerPoint presentations, mind-training software, or 3D visualization tools to help pupils comprehend concepts more rapidly.
- It must be accepted that providing visuals for topics helps pupils enjoy or engage in their learning. They can become more involved in class, but also teachers can use this to increase the interest and interaction in their lessons.

1.3.2. Globalization:

- Students attending school in various regions of the same state can connect virtually with peers without leaving the classroom.
- To help individuals learn foreign languages online, some services such as www.glovico.com connect a group of students with a teacher in another country.

1.3.3. No Geographical Restrictions:

- With the introduction of the online degree program, the need for physical presence in classes is no more. Even some foreign universities are now offering online degree programs to students.
- In the modern education system, online education and distance learning are important components.

Using 21st-century educational methods makes it easier for teachers to impart knowledge and assess the potential of their students. On the other hand, using interactive as well as audio-visual technology significantly speeds up the learning process for the students. This creative merging of technology, as well as instruction, opens up new possibilities in education, but several strategies stand out especially well.

1.4. Distance Education:

Even though distance education has been in use for a long time, its importance has increased as a result of the rapid development of communication technology. Today it is possible to actively participate in class while watching it live from a distant part of the world. Online education requires an internet connection, computer, or another smart device, but also requires appropriate communication software. Technology in education has made it possible for live chat, virtual presence as well as face-to-face interaction between students and teachers [11], [12]. There is also access to a vast array of complementary learning tools such

as recordings of past sessions. This type of training is used in many US schools, sometimes as an additional teaching method, as well as other times as a stand-alone, full-time online learning option. The options currently make it possible to participate in extra-curricular activities offered by the school in this way. And finally, many colleges around the United States offer diplomas that can be obtained this way.

1.4.1. Cloud computing:

One of the finest instances of the effectiveness of learning technology is the use of cloud technology. Because data exchange was somewhat difficult in the past, computer usage in education was quite restricted. Nowadays, educational hardware is connected through Internet services that save data in the cloud. This shows that all the data kept on the server is accessible to every student. Team projects, information sharing, and multimedia broadcasting are now easier thanks to cloud services like Office or Google Drive. This form of data exchange can also be presented to children through specific educational programs. Another advantage is that it is much less expensive to pay for these cloud services than to get customized software for each school device. This technology is extremely important when a teacher uploads homework assignments as well as multimedia content for students to view during e-learning.

1.4.2. Virtual Reality:

Virtual reality (VR) and augmented reality (AR), two relatively new technical innovations, bring a new viewpoint to the classroom. Teachers may transport pupils to remote locations using VR headsets so they can interact with prehistoric societies or dinosaurs. It is a wonderful complement to the learning process as it enables one to experience unrealistic close interactions climbing a mountain or going into space.

Contrarily, augmented reality refers to the improvement of reality by the incorporation of digital aspects into the actual world, which has a favorable impact on student engagement. The game Pokemon GO, in which players explore real-world streets in search of the game's characters, is arguably the most well-known application of augmented reality technology worldwide. Other than gaming, this technology has applications in other fields, and there is little question that the opportunities this potent instrument offers will shape education in the future.

1.4.3. Robotics:

In addition to accelerating the learning process, new technology introduces students to the problem-solving elements of modern industry. Science projects in schools are changing because of the inclusion of robotics, programming, and 3D printing. These are fundamental skills of many in-demand professions that have a lot of room to grow as well as develop in the future. Robotics paves the way for future professional development by introducing kids to all aspects of the ("science, technology, engineering, or mathematics") STEM system. Making a robot requires more than just designing it and using 3D printing to make its components; it also requires programming. Although it may seem difficult, many schools teach the fundamentals of robotics and other technology breakthroughs to even the youngest kids according to age or intellectual development.

1.5. Technology is a Crucial Component of Contemporary Schooling:

Technology in education is the cornerstone of contemporary student growth or advancement. Early exposure to computer technology, programming, or modern communication techniques greatly simplifies the ultimate acceptance of new standards as well as ways of operation. As a result, more and more schools are renovating their spaces to accommodate the teaching

methods of the twenty-first century. This is a fantastic way to prepare the children for the challenges that lie ahead but will make it simpler for them to do their assignments.

2. LITERATURE REVIEW

R. Krohn explored the expanded functions of technology in education, which is no longer only a single medium as once thought. Distances are no longer a barrier to education, and thanks to technology, education can now be delivered directly to the student's doorstep. Technology has an impact on every industry imaginable, and education is no exception. In its broadest meaning, education is a type of learning in which teaching, training, as well as research, are used to pass on from one generation to the next the information, abilities, and habits of a group of people. Applying contemporary technology in an orderly manner to raise educational standards is known as educational technology [13].

Yingying Sun studied the impact of contemporary educational technologies on the standard of education. It is the culmination of all technological tools used by people in educational endeavors, with quality education serving as the primary focus of China's education system reform. Modern educational technology, which is based on information technology applications and is widely employed in the real teaching and learning process, has grown in importance as a tool for lifelong learning, social education, and modern distant learning. Emphasizing the development of student's practical skills and their willingness to try new things, and then progressively improving students' general quality to advance the implementation of quality education [14].

Mr. Chinmoy Goswami studied the use of contemporary technology in Indian schooling. Almost every area of action where information and communication are important was affected by the spectrum of potential advantages. Improved teaching or learning techniques, greater student outcomes, higher levels of student involvement, including seamless communication with instructors and parents are all part of it. The information as well as skills that students gain in school today significantly differ from the knowledge or skills that employees in companies and communities require. Employers claim that they are looking for students who are capable of working in a team, are professional, have strong morals and work ethics, can think critically and solve problems, can manage a large group of people, or are proficient in both verbal and written communication [15].

3. DISCUSSION

3.1. Technology's Importance in Education:

One of the crucial functions of technology in education is that it allows teachers to provide all study materials so that students may more easily and effectively comprehend the issues at hand. Modern classrooms and “Smart” classes, which primarily focus on improving each student's performance, are being approached by educational technology. One must read this article in the last part to fully get the Significance of Technology in Education or how a new generation affects the transformation in the overall educational landscape. Figure 1 shows the importance of technology in the education system.

The significant improvement in communication that technology has brought to education raises the bar for helping and assisting students in learning new skills and information. In addition, students can access course material from anywhere in the world using technology tools for online education. Despite having access to a variety of higher technological education resources, schools still choose pen-and-paper learning techniques. However, thanks

to Ed-Tech, the whole educational system has transformed, enhancing student learning at their fingertips.

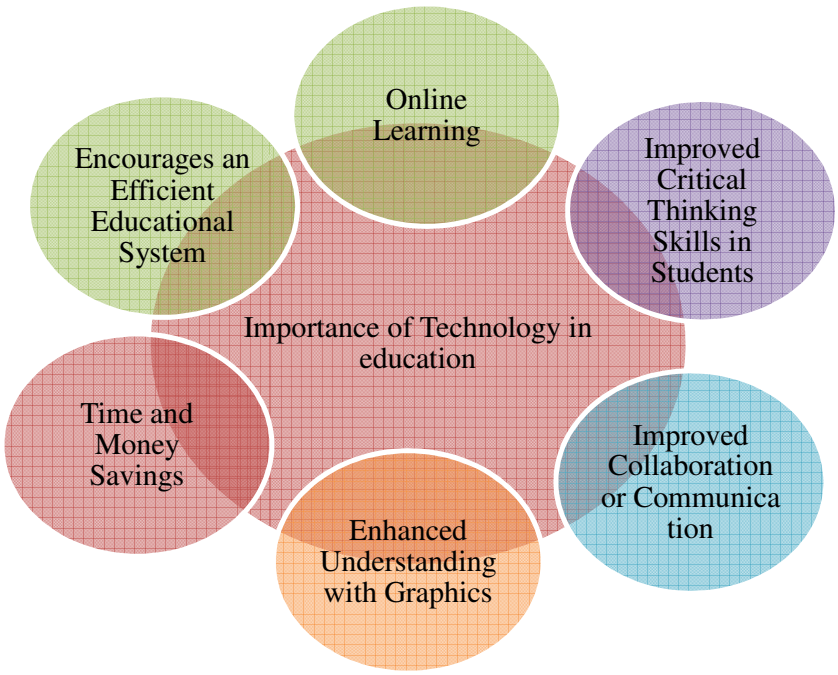

Figure 1: Illustrate the Importance of technology in the modern education system.

3.1.1. Online Learning:

Online learning at home has been tremendously aided by contemporary communication methods. When schools were forced to close and completely transition to distance learning because of the 2020 worldwide pandemic, this teaching strategy became vitally crucial. Online education was already fairly common before that since it allowed those who desired professional growth but had the time or resources to do so to receive it. Even if the instructor is on a different continent, distance education makes it possible for students to attend lectures.

People may attend institutions that may be geographically situated in another part of the world through online education, but it also enables them to combine employment and study. In particular, a lot of educational institutions now allow students to attend courses, take tests, but also work on projects whenever it's convenient for them since they appreciate the value of technology in education. With this approach, more individuals may now access high-quality education.

3.1.2. Improved Critical Thinking Skills in Students:

Technology's significance in education is especially clear when it comes to the improvement of critical thinking. Students can express themselves in unique ways through various instructional strategies, leading to various conclusions. To get the intended result, they accomplish this by treating information critically and taking into account all the available

information. Tablets, videos, animations, collages, audio recordings, the Internet, and other learning aids have taken the function of textbooks or notebooks. Because they can interact in a way that is natural to them and relatable to them, even shy students or those who have trouble working in a team now can succeed and create better outcomes [16].

3.1.3. Modern School:

Perhaps the most obvious change was observed in the classroom of contemporary schools. Traditional classrooms only had the blackboard, chalk, or classroom globe as gadgets, but pupils today have access to cutting-edge technological developments like artificial intelligence. Students may virtually go to any location on Earth during geography lessons, and they can view a 3D film about the ancient world during history lectures. In the sphere of education, the days of projector-based lectures in the classroom are long gone. Higher education uses everything described above as larger university budgets enable the wider and more thorough application of cutting-edge technologies for instruction and research.

3.1.4. Encourages an Efficient Educational System:

Without a question, the use of technology in the classroom promotes kids' overall development. Technology is a powerful tool for promoting a strong educational system globally. One of technology's most crucial contributions to education is to increase accessibility, excitement, and enjoyment of learning. Students' skills and knowledge are improved as a result of educational technology improvements.

3.1.5. Technology Aids Students in Learning More Effectively:

Do any of us still have questions about the role that technology plays in education? Let me tell you that a survey has shown that most students benefit from using digital learning technologies to raise their grades. Additionally, students may learn more and better from many resources without relying on a facility or an instructor thanks to technology-based E-learning.

3.1.6. Improved Collaboration or Communication:

Humans are all aware of how much technology has advanced both cooperation and communication. Similarly, educational technology improved communication and cooperation between classmates, instructors, and students as well as between parents and their children. Teachers have access to a variety of e-learning tools thanks to educational technology, including gamification, smartboards, or “Augmented Reality and Virtual Reality” (AR/VR). Teachers may increase the learning opportunities for pupils by using a variety of digital resources due to advancements in education technology. Technologies used in e-learning solutions help instructors become better educators. Through the use of technology, teachers may effectively train students via video courses, microlearning, appealing infographics, etc. Additionally, professors can engage students by offering online exams and various courses.

3.1.7. More Possibilities for Project-Based Learning Online:

Instead of wasting time on pen and paper-based assignments, the majority of schools now choose online project-based learning. Additionally, project-based learning has become much more convenient and accessible for students thanks to education technology solutions. Presently, Google Docs, Google Classroom, “PowerPoint presentations” (PPT), or Slides, among other tools, may be used to make presentations. Students complete assignments using their advanced knowledge and abilities through online project-based learning.

3.1.8. Options for Personalized Learning:

Education technology is essential both for successful teaching and for giving students the possibility of personalized learning. Students now have access to ever more information and resources, allowing them to customize their education. Individualized learning is considered because individuals understand that not every student learns at the same rate. Self-paced learning, which is often referred to as personalized learning, enables people to tailor the amount of content they receive to their unique needs.

3.1.9. Enhanced Understanding of Graphics:

Through the use of video graphics, technology has assessed the learning process and made it easier for people to grasp and retain concepts. The visual information system is the only thing that makes this feasible. Students can retain knowledge between 25 and 60 percent when VR technology is used in the classroom. Students may have fun while studying at the same time with VR educational technologies, such as gamification, visual graphics, mobile learning, microlearning, etc., to maintain interest in their studies.

3.1.10. Time and Money Savings:

The learner can spend less money on other resources because there is more study material available thanks to e-learning technologies. Even now, many institutions place a greater emphasis on purchasing online study material since it is more affordable and practical for storage. Teachers may save time or money by using cutting-edge educational, technology systems like virtual reality and augmented reality programs, which are available online for free and speed up learning.

3.2. Technology's Effect on Education:

Technology now pervades every part of our daily lives and binds us all together. Technology is the only tool that provides too many methods of enhancing the educational system. Technology significantly affects education, affecting both teachers and students. The flexibility and depth of instruction have increased owing to current educational technologies. Numerous technology-driven instructional technologies have made it possible to access free internet resources, tailored learning materials, more fascinating information, better visual understanding, and opportunities for advanced learning.

Even though technology is already being used in education, it is challenging to use it for both teaching and learning. Technology use within the classroom is still very low, even though many schools today are fortunate to have easy access to technology, skilled instructors, and a supportive regulatory system. Some believe that the limited acceptance of technology in education is to blame for the pedagogic attitudes of the instructors. The potential of technology to improve education should not be underestimated. Children with special needs have always benefited from technological assistance. For the blind, for example, Braille machines have been used. In addition, technology is used in special needs programs for autistic children to improve learning. Educators use technology in the classroom to try to improve the educational system or address underlying problems that affect children with special needs. Therefore, technology can be seen as a catalyst of good as well as a tool [17]–[19].

There are many technologies available today that can be used to improve and support learning. When technology is employed for both learning and education, while addressing other relevant difficulties, such as technological breakthroughs in schools and districts or unequal access to network equipment, they can only claim that we have introduced technology into education. The main goal of technology integration in education is to change

the way instructors and students receive, access, evaluate, present, or disseminate information. Especially for students with special needs, it can help to diversify instruction and democratize information in the classroom [20].

3.3. Advantages:

- It increases kids' motivation to learn.
- Provide students with demanding schedules with the option of working from home.
- Teach students new technology skills that they may use later in the business.
- Reduce copying or paper costs while promoting the "green revolution" philosophy.

3.4. Disadvantages:

- Many experts or seasoned persons contend that utilizing such technologies in the classroom harms students' creativity and limits their ability to think clearly.
- It could occasionally take a long time, at least from the teacher's perspective.
- Installing this technology is expensive.
- When used in excess, there might be health hazards.

3.3. Technology in Education's Challenges:

India currently lacks a place to examine the technological educational system despite the importance of technology in education and other factors. We are having difficulties in some way implementing contemporary educational technology in the classrooms. Increased screen usage may potentially cause serious health problems. For instance, prolonged use of computers, phones, and tablets, for academic purposes may result in headaches, neck discomfort, impaired vision, and other problems. Teachers in online classrooms are unable to keep an eye on every student, which leads them to encourage cheating. By exchanging test sheets, copying and pasting answers, and using Google throughout an online class test, the newest technology encourages pupils to cheat.

4. CONCLUSION

Even though technology benefits education, it can have adverse effects. This should be constructively utilized by teachers or students to reduce the barriers that several schools or students face while trying to succeed. As a result, every country will soon need to develop a more technologically sophisticated education sector. Because of the usage of technology, education and learning are now more enjoyable. The major goal of this study is to have a better understanding of the role played by technology in contemporary educational systems. Through this paper, people will be made aware of the value of technology in today's educational system and the future.

REFERENCES

[1] D. Arwen and D. R. Puspita, "The Role of Technology on Students' Character Education," in *Journal of Physics: Conference Series*, Mar. 2020, vol. 1477, no. 4, pp. 12–26. doi: 10.1088/1742-6596/1477/4/042070.

[2] US Department of Education and Office of Educational Technology, "Reimagining the Role of Technology in Higher Education," *U.S. Dept. Educ. - Off. Educ. Technol.*, vol. 9, no. January, p. 107, 2017, [Online]. Available: https://tech. ed.gov/files/2017/01/NETP17.pdf

[3] A. S. Al Musawi, "Redefining Technology Role in Education," *Creat. Educ.*, vol. 02, no. 02, pp. 130–135, 2011, doi: 10.4236/ce.2011.22018.

[4] M. Šimenc, "The role of technology in education and equal opportunities for students in the covid-19 crisis," *Sodob. Pedagog. Contemp. Educ. Stud.*, vol. 72, pp. 12–26, 2021.

[5] F. Mahini, Z. J.-A. Forushan, and F. Haghani, "The Importance of Teacher's Role in Technology-Based Education," *Procedia - Soc. Behav. Sci.*, vol. 46, pp. 1614–1618, 2012, doi: 10.1016/j.sbspro.2012.05.348.

[6] A. Duncan, "Future Ready Learning: Reimagining the Role of Technology in Education," 2016.

[7] C. J. Cullen, J. T. Hertel, and M. Nickels, "The Roles of Technology in Mathematics Education," *Educ. Forum*, vol.

84, no. 2, pp. 166–178, Apr. 2020, doi: 10.1080/00131725.2020.1698683.

[8] U. Alam, "The Role of Technology in Education," Mar. 2021. doi: 10.33422/2nd.aretl.2020.03.79.

[9] A. Kawasaki and J. Rhyner, "Investing in Disaster Risk Reduction for Resilience: Roles of Science, Technology, and Education," *J. Disaster Res.*, vol. 13, no. 7, pp. 1181–1186, Dec. 2018, doi: 10.20965/jdr.2018.p1181.

[10] M. Pears, M. Yiasemidou, M. A. Ismail, D. Veneziano, and C. S. Biyani, "Role of immersive technologies in healthcare education during the COVID-19 epidemic," *Scott. Med. J.*, vol. 65, no. 4, pp. 112–119, Nov. 2020, doi: 10.1177/ 0036933020956317.

[11] G. M. Nurullina and R. K. Ramazanov, "Project technology in the system of modern professional education," *Utop. y Prax. Latinoam.*, vol. 25, no. Extra 7, pp. 409–416, 2020, doi: 10.5281/zenodo.4009771.

[12] L. He, "Application of Computer Information Technology in Modern Distance Education System," in *Journal of Physics: Conference Series*, 2020, vol. 1453, no. 1. doi: 10.1088/1742-6596/1453/1/012075.

[13] R. Krohn, "The role of technology in biodefense.," *J. Healthc. Inf. Manag.*, vol. 17, no. 3, pp. 28–30, 2003.

[14] Y. Sun, "Study on the Effect of Modern Educational Technology on Quality Education," in *Proceedings of the 2017 7th International Conference on Mechatronics, Computer and Education Informationization (MCEI 2017)*, 2017, vol. 75, no. Mcei, pp. 44–47. doi: 10.2991/mcei-17.2017.10.

[15] H. Cetin and S. Kalaycı, "The Impact of China's Economic Growth and External Debt on China's Foreign Direct Investment (1982-2010)," *Int. Proc. Econ. Dev. Res.*, vol. 52, no. 1, pp. 48–52, 2012, doi: 10.7763/IPEDR.

[16] E. Hawa *et al.*, "The Role of Information Technology Education in Preventing Child Grooming on Social Media," *Proc. ICECRS*, vol. 8, Jul. 2020, doi: 10.21070/icecrs2020483.

[17] T. AKSU and G. CANTURK, "Equality of Educational Opportunity: The Role of Using Technology in Education," *Int. J. Acad. Res. Progress. Educ. Dev.*, vol. 4, no. 4, 2015, doi: 10.6007/ijarped/v4-i4/1933.

[18] M. Sahu, A. Grover, and A. Joshi, "Role of mobile phone technology in health education in Asian and African countries: A systematic review," *International Journal of Electronic Healthcare*, vol. 7, no. 4. pp. 269–286, 2014. doi: 10.1504/IJEH.2014.064327.

[19] Y. Gao, Q. P. Zhao, X. D. Zhou, Q. M. Guo, and T. Xi, "The role of virtual reality technology in medical education in the context of emerging medical discipline," *J. Sichuan Univ. (Medical Sci. Ed.*, vol. 52, no. 2, pp. 182–187, 2021, doi: 10.12182/20210260301.

[20] M. Landen, "The role of technology in education and training," *Ind. Commer. Train.*, vol. 29, no. 7, pp. 230–235, Dec. 1997, doi: 10.1108/00197859710190751.

CHAPTER 20
IMPACT OF EDUCATION IN PRESCHOOLS FOR CHILD GROWTH AND DEVELOPMENT

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ABSTRACT: ***Education is the basic need of every human being, as education is the backbone of society. So everyone should be educated as education is a basic right and need of people in society from kids to old everyone can have the education. So the focus of the study is to know the impact of pre-schooling education on kids in society and its effect on their growth and development. There are many studies done by many child researchers on the different aspects of education for immature and small kids and how it affects their mentality further. Thus, preschools are now developed in many countries as the basic center for child development while some countries still develop such education systems. Preschools mostly help the child to develop an interest in the school so it now becoming necessary for parents to have preschool for the little one. The study further helps in analyzing different aspects and parameters of preschools in the development of child vision.***

KEYWORDS: ***Child Growth, Chile Development, Education, Preschools, School.***

1. INTRODUCTION

A preschool, also referred as a nursery, pre-primary, or play school, is an educational facility or learning place that provides children with early childhood education before they enter compulsory education at primary school. It can be run publicly or privately, and it can be sponsored using public monies. In an era when school was only available to children who had previously learnt to read and write at home, there were several attempts to make school available to orphans or the children of factory workers [1].

Johann Friedrich Oberlin and Louise Scheppler established an early facility in Strassbourg in 1779 to care for and educate pre-school children whose parents were gone during the day. Similar baby homes were created in Bavaria about the same period, in 1780. Pauline zur Lippe founded a preschool in Detmold in 1802. In 1816, philosopher and pedagogue Robert Owen established the first British and, most likely, the first baby school at the world in New Lanark, Scotland. Owen wanted the youngsters to have a decent moral education as part of his cooperative mill enterprise so that they would be ready for employment. His method was effective in developing obedient youngsters with basic literacy and numeracy skills [2], [3].

In 1819, Samuel Wilderspin established his first baby school in London, and he went on to build hundreds more. He wrote several writings on the subject, and his work became the paradigm for infant schools across England and beyond. Play was a key aspect of Wilderspin's educational system. The playground is said to have been invented by him. Based on the school, Wilderspin authored On the Importance of Educating the Infant Poor in 1823. The next year, he began working for the Infant School Society, telling people about his beliefs. He also wrote "The Infant System, for the development of all infants from one to seven years of age's physiological, cognitive, and moral capacities" [3], [4].

Countess Theresa Brunszvik (1775-1861), who knew and was motivated by Johann Heinrich Pestalozzi, was inspired by this example to start the first of eleven care facilities for young infants on May 27, 1828 in her house in Buda. She founded an institute for the establishment of preschool programmes in 1836. The concept gained popularity among the aristocracy and middle classes and was adopted across the Hungarian monarchy [5].

Friedrich Fröbel (1782-1852) founded the Play and Activity Academy in Bad Blankenburg, Thuringia, in 1837, in the principality of Schwarzburg-Rudolstadt, which he called Kindergarten on June 28, 1840. Fröbel-trained women established Kindergartens all throughout Europe and the world. The first kindergarten inside the United States was established in 1856 in Watertown, Wisconsin, and was administered in German [6]–[8].

Elizabeth Peabody established America's first English-language kindergarten in 1860, and the first unrestricted preschool in America had been founded in 1870 by Conrad Poppenhusen, a German industrialist and philanthropist who not only founded the Poppenhusen Institute. Susan Blow set up the first publicly financed kindergarten in the United States in St. Louis in 1873. The Wesleyan Methodist Church in Charlottetown, Prince Edward Island, established Canada's first private kindergarten in 1870, and by the end of that decade, they were ubiquitous in big Canadian cities and towns. In 1882, the country's first public-school elementary schools were created at Central School in Berlin, Ontario. The Toronto Normal School established a Kindergarten education department in 1885.

Elizabeth Harrison published extensively on childhood education theory and fought to improve educational standards among kindergarten teachers by founding the National College of Education in 1886. Head Start was the initial publicly supported preschool programme in the United States, established in 1965 by President Lyndon B. Johnson for low-income families; at the time, only 10% of children were enrolled in preschool. Various states financed kindergarten for reduced families in the 1980s due to high demand.Preschool education in India is not yet formally recognised by the government and is mostly handled by privately owned businesses such as Petals Preschool Mothers Pride and others. With the surge in households where both parents work, there is a great need for play schools that cater to caring for very young children. However, the NEP (National Education Policy) 2020 is a great step forward in the direction of formalising preschool education. The NEP 2020 has prioritised early childhood development and education, arguing that the foundational stage three to eight years) is crucial and necessitates official/formal involvement.

In reality, NEP 2020 has called for a schooling system to replace the old 10 + 2 approach. The preschools that are pioneers in adopting the NEP 2020 have only one name: Petals Preschool & Daycare. In India, there are not just individual preschools, but also hundreds of preschools that function as a chain of preschools. These preschools operate on a franchise basis, allowing other entrepreneurs to run preschools under their name. In India, there will be over 450 preschool franchise providers by 2021.

2. LITERATURE REVIEW

Shuo Zhou, Because of its ease, flexibility, and independence, mobile learning has become an efficient solution to address the demands of work learning in an epidemic environment. The influence of m - learning on learning education and early learning in the pandemic is studied and discussed in this research. To investigate the speed of the online learning community in obtaining learning resources, a mobile learning community resource sharing algorithm is utilised. By comparing the pace of learning resources received in traditional groups, the benefits of online learning are examined. The random offloading algorithm (ROA) is introduced in this study to assess student responses. According to the findings, the majority of pupils feel that mobile learning aids in topic learning to a higher level.

Lijuan Liao and Fanjun Gu, To investigate the application of a.i. interaction new tech in preschool education practise courses, early education education, 5G wireless network, artificial intelligence interaction technology, and other relevant theories are combined, a questionnaire survey is used as the research method, and six-year-old kindergarten students in

a Chinese city are used as research subjects. Preschool children practise curricular learning scenario, exchange and collaboration situation, learning impact, and learning attitude study are used to provide adaptive optimization recommendations. The results suggest that students' cognition of learning has changed following the implementation of intelligence teaching in terms of learning of practical courses, however the mean value of various P values 0.05 is small in the real classroom adaption stage. As a result, future research on the application of a.i. interaction technologies in preschool education practise courses in a 5G wireless network environment provides a fresh theoretical foundation and optimal path for preschool education.

Anton Komaini et al. The goal of this work is to build and apply motor learning measurement tools for preschool education utilising sensor technologies. This sort of research includes three stages are needs analysis and designing motor learning measuring tools, execution of motor learning measuring things and creating motor learning measurement tools, phase assessing motor learning measurement devices, and dissemination. The purposive sampling strategy was used in this study, which included instrumentation specialists and Kindergarten children. As a result, it is intended that this assessment tool would be used by the larger community to improve preschool education learning [8].

Nirmala Rao et al. This study focuses on the provision of center-based preschool education in India for children aged 3 to 6 years. It assesses access rates to various programmes and emphasises concerns about fair access to preschool services and preschool education quality. While India has made significant progress in increasing access to preschool education, various problems must be addressed in order to improve its quality. Furthermore, increasing funding allocations to preschool education, a focus on professional training of the childhood development workforce, and the use of technology to monitor government programmes have the potential to significantly improve the early childhood system [9].

Bekir Yıldırım This research looked at the effects of the Covid-19 epidemic on preschool education and sought answers on how preschool education is administered, what practices are held, what problems must be solved, and what steps must be made to ensure preschool education's long-term viability. The sample included 25 preschool instructors and 30 parents who were chosen by criteria sampling, a type of purposive sampling. The research was based on phenomenological, a qualitative inquiry design. Participants indicated that the Covid-19 epidemic had multiple negative consequences on preschool education and that they hosted art, science, and mathematics events and games to maintain education but encountered various problems along the way [1].

Arya Ansari et al. The current study looked at the relationships between preschool instructors' self-reported emotional tiredness and the quality of their classroom interactions, as well as the dose and rigour of their education. Furthermore, there was some indication that the relationship between emotional exhaustion and preschool teachers' preschool conversations was reliant on with there years of higher education, with the relationship among teachers' education as well as their interactions between children being reduced when they explained themselves as more emotionally exhausted. The findings imply that supporting preschool teachers' well-being, particularly assisting in the reduction of emotional weariness, may be a helpful technique for fostering a higher quality classroom environment.

Leydi Johana Chaparro-Moreno et al. We investigated how preschool classroom circumstances impacted the amount of abstraction in children's discussions, as well as how the context and language of conversational partners influenced children's verbal engagement. A Bayesian analysis revealed that in small-group activities labelled as math and science, children and instructors utilised much more abstract language than in other coded contexts.

The inconsistency of the relationship between ECE quality assessments and children's outcomes prompts practitioners to reconsider what these measurements should examine. This study shows that ECE settings should pay more attention to elements that promote children's development, such as learning resources, groupings, and peer relationships.

Meghan E. McDoniel et al. The current study looked at how the ECERS-R and CLASS scores connect to changes in preschoolers' skills and if the relationships are greater in the second half of the school year than overall. Teacher reports of intellectual functioning, physiological, self-regulation, socioeconomic, vocalizations, and written literacy skills were used to assess school readiness in the fall, winter, and spring, as well as a direct assessment of child's letter awareness as well as pre-literacy skills in the spring and fall. The findings revealed that measures of classroom quality had no relationship to children's skills in spring after adjusting for autumn skills, however the ECERS-R Interactions was the only quality category connected with all teacher-reported spring skills after controlling for winter scores .

3. DISCUSSION

Young children learn via play. If a child's initial exposure to classroom learning is in an extremely intellectual setting, they may fail to acquire a strong sense of interest and become disinterested in school. Preschool allows children to learn in methods that interest them, fostering a good link with learning. The ideal preschool fosters in youngsters a desire to learn that they will carry with them throughout their academic careers.Children spend a significant amount of time in preschool with other children and adults who are not members of their families. The setting provides numerous opportunities to understand how to make friends, work cooperatively, listen, and develop basic communication skills.

When children play and engage in activities with their friends, little disputes that cause irritation, rage, and other emotional issues are nearly unavoidable. These clashes provide possibilities for "teachable moments." Teachers should urge students to consider how their actions affect others and to develop interpersonal problem-solving skills. Preschool grads depart with emotional skills that they will use for the rest of their life.Teachers at preschool provide a range of games and activities to assist youngsters develop pre-literacy abilities. Children sing alphabetical songs, discover rhymes that help them differentiate between sound, read aloud tales, and play with magnetic alphabet letters. Children frequently acquire a feeling of joy and drive to continue studying in addition to understanding these fundamentals. Preschool pre-literacy learning occurs during activities that are naturally appealing to children, resulting in good connections with reading.

Preschool does not teach arithmetic to children until they are ready, but it does establish the groundwork for future success via pleasant activities and supervised play. Children frequently engage in match, classifying, or numbering games, as well as board games that aid in the development of pupils' awareness of numbers as well as categories.Young children possess strong imaginations, which may be cultivated to feed learning and creativity. The preschool setting is designed to promote discovery. Preschool teachers are specially prepared to assist toddlers in developing their own ideas and opinions. Instead of emphasising "proper" responses or actions, they foster inquiry, ask questions, and listen to children's ideas. Children are more inclined to develop imagination and curiosity in the presence of a conducive atmosphere and appropriate adult relationships.

Preschoolers get to pick whatever activities they want to participate in. That means students get to pursue their hobbies while simultaneously learning decision-making skills as well as responsibility. Children are urged to make their own decisions. Teachers observe youngsters

and note the activities they appear to be interested in. If a youngster appears unclear of how to join other children's learning and development, they may provide advice on how to do so.

Children are frequently given opportunities to practise being responsible in preschool. Teachers educate and require children to clean their hands, maintain personal things in cubbies, and return toys to their proper places.Preschoolers learn not just how to care for themselves, but also how to care for others. Teachers urge students to assist one another in learning skills in which they excel and to see themselves as resources for other students. Preschoolers may be offered opportunities to assist in the classroom. Teachers may ask kids to assist arrange the table at snack time, amend the calendar, or plan an activity.Children develop language skills best when they are exposed to a variety of languages. Teachers at preschool assist youngsters in developing language skills by introducing new terminology during activities and asking wanted to think questions. Preschool children have a distinct edge in learning to speak successfully because they have numerous opportunities to explore new things, listen to learn books, act out tales, and sing.While literacy, numeracy, and cognition are essential, they are not the only skills which young children should master. Many preschool activities are designed to help toddlers develop fine motor skills and physical coordination. With crafts like threading beads, painting, and even cutting with scissors, children are encouraged to improve fine motor skills. Many preschools also provide everyday opportunity for youngsters to test their abilities by leaping or climbing.

On the surface, preschool may appear unstructured. However, classrooms are always designed to promote social contact and skill development. Preschool teachers give opportunity for children to participate in group activities, listen to tales, and collaborate with other children. Children may develop their curiosity in a setting with a variety of activity options while yet becoming used to regulated activities.Kindergarten has gotten increasingly intellectual throughout the years. As a result of this tendency, some parents think that their children require a better pre-math and pre-literacy framework in preschool in order to excel later in life. Others are concerned that their children require more controlled play and opportunity to pursue their interests. Preschool provides youngsters with both types of learning chances. A high-quality education programme will provide children with safe play time as well as skill development which will prepare them for preschool.Preschool, above all, helps youngsters learn the abilities they will need to flourish throughout their lives. They will be more able to seek assistance and collaborate if their social and communication skills develop. They are much less likely to suffer or have a poor school experience if they have excellent pre-literacy, cognitive, and math foundation abilities. Children's emotional skills and comprehension of the world will assist them become contributing members of society as they grow older.

4. CONCLUSION

Education is a fundamental human necessity since it is the foundation of society. So everyone should be educated because education is a basic right and requirement of all people in society, from children to the elderly. The study's goal is to learn about the effects of pre-school education on children in society and how it affects their development and progress. Many studies have been conducted by child specialists on the many parts of schooling for immature and little children and how it influences their mind later. Thus, preschools are currently created as the basic centre for child development in many nations, while some countries continue to build such education institutions. Preschools primarily assist children develop an interest in school, hence it is increasingly becoming vital for parents to enroll their children in preschool. The study also aids in the analysis of several features and factors of preschools in the evolution of kid eyesight.

REFERENCES

[1] B. Yıldırım, "Preschool Education in Turkey During the Covid-19 Pandemic: A Phenomenological Study," *Early Child. Educ. J.*, 2021, doi: 10.1007/s10643-021-01153-w.

[2] B. Yıldırım, "Preschool STEM Activities: Preschool Teachers' Preparation and Views," *Early Child. Educ. J.*, 2021, doi: 10.1007/s10643-020-01056-2.

[3] B. M. Doove, F. J. M. Feron, J. van Os, and M. Drukker, "Preschool Communication: Early Identification of Concerns About Preschool Language Development and Social Participation," *Front. Public Heal.*, 2021, doi: 10.3389/fpubh.2020.546536.

[4] M. Maleki, A. Mardani, M. M. Chehrzad, M. Dianatinasab, and M. Vaismoradi, "Social skills in children at home and in preschool," *Behav. Sci. (Basel).*, 2019, doi: 10.3390/bs9070074.

[5] G. Kokkalia, A. Drigas, A. Economou, P. Roussos, and S. Choli, "The use of serious games in preschool education," *Int. J. Emerg. Technol. Learn.*, 2017, doi: 10.3991/ijet.v12i11.6991.

[6] I. B. Shiyan, T. N. Le-van, O. A. Shiyan, and S. A. Zadadaev, "The Key Issues in Implementing the Federal State Education Standard for Preschool EducationResults of the National Survey of Preschool Education Quality in 2016–2017," *Vopr. Obraz. / Educ. Stud. Moscow*, 2021, doi: 10.17323/1814-9545-2021-2-82-106.

[7] X. Yang and X. Li, "Analysis of intelligent computer-aided preschool education effect evaluation system," *Comput. Aided. Des. Appl.*, 2021, doi: 10.14733/cadaps.2021.S4.25-36.

[8] A. Komaini *et al.*, "Motor Learning Measuring Tools: A Design And Implementation Using Sensor Technology For Preschool Education," *Int. J. Interact. Mob. Technol.*, 2021, doi: 10.3991/ijim.v15i17.25321.

[9] N. Rao, N. Ranganathan, R. Kaur, and R. Mukhopadhayay, "Fostering equitable access to quality preschool education in India: challenges and opportunities," *Int. J. Child Care Educ. Policy*, vol. 15, no. 1, 2021, doi: 10.1186/s40723-021-00086-6.

CHAPTER 21
ANALYSIS OF THE ROLE OF SCHOOL EDUCATION IN CHILD DEVELOPMENT

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ABSTRACT: ***Education is a basic human right and everyone should get it for their growth and development in society as well as to make life convenient. Education in the life of the child is necessary as the right education makes the ideal citizens of the nation. Thus the focus of the study is to understand and elaborate on the role of education in child growth and development for the betterment of society and thus the betterment of the nation. There are different, strategies and methods developed for improving children's health and overall growth in a positive manner. Thus, different experts had different views and opinions on child growth by giving proper education to create an ideal citizen for the nation. Thus, education is the most important factor in child development so every child must get an education as one of the basic needs to sustain society. The study further helps in developing the different educational skills for the child in their school and the better learning skills to acquire better knowledge.***

KEYWORDS: ***Child, Education, School, School Education, Study.***

1. INTRODUCTION

Every child is born with the right to an education. There are several reasons why education is important for children. It fosters wisdom and intellect, which aid in being self-sufficient in life. It is essential for the formation of personality. It also builds confidence and assists us in being responsible citizens of our country. Children are our country's future. They learn what is taught to them since childhood. They should be encouraged to continue their studies. Education is an important part of a child's life since it improves their skills, personality, and mindset. "Education is the foundation upon which we construct our future," as the saying goes [1],[2],[3].

We all want our children to succeed in life, which is only feasible with a strong education. A well-educated youngster may weather the ups and downs of his family and rise to a respectable social position. Education instils in youngsters self-discipline, a sense of responsibility and teamwork, and keeps them from feeling socially insecure. It promotes self-assurance and smart decision-making. As a result, every child must be educated in order to live a happy life. It is crucial for children since it helps to erase different social ills that exist in society, such as poverty, gender inequality, racism, religion, and so on. Education may be obtained through a variety of sources [4].

Education is crucial for children since they form the foundation of the nation and must be kept up to date on current events. It teaches a youngster humanity, decent manners, and how to interact with people. Most vulnerable time of life is early infancy. Early childhood education attempts to improve the development of young children. Education is especially important throughout childhood since it is an opportune period for children to build social and mental abilities that will aid in their development and success. Education throughout childhood also allows for self-development and learning about one's hobbies. At this point, the value of education in our life extends much beyond what we learn in a textbook. A youthful mind is full with questions that need to be answered. Otherwise, youngsters may make poor decisions in adulthood .

Recognizing the significance of child education, the Indian constitution enacted the Right to Schooling Act in 2009, making education compulsory for children from 6 to 4 years. Even

now, at least 35 million youngsters aged 6 to 14 do not attend school. Education also gives knowledge such as how to build talent and artwork. It enables us to analyse life events and even learn from our mistakes. It provides youngsters with a greater opportunity to determine future goals. Education of youngsters entails having a logically set mind to accomplish something and achieve it. Children require education to learn how to live in this world [5],[6],[7],[8].School is the primary source of information for youngsters. It allows individuals to get information in a variety of educational topics such as people, literature, history, mathematics, politics, and many more. This adds to thought process cultivation. When one is exposed to numerous cultural influences, his or her perspective on the world and existence broadens [9].

A child's initial point of contact with others is at school. Until then, the child's only human contacts have been with his or her parents and immediate family members. And familiarity is a fertile ground for staleness. Schools expose youngsters not just to new concepts, but also to peers their own age. This instils gregarious behaviours including as empathy, companionship, engagement, and aid, which will be useful in their maturity.

2. LITERATURE REVIEW

Adeolu Joshua AYENI1 & Felicia Bosede BAMIRE, The purpose of this study was to investigate the key roles played by school-based management (SBM) in decision-making, physical plant planning, school-community relations, academic programme co - ordination, and policy options, as well as the impact of the these important roles on educators' performance in public secondary schools in Owo Local Government, Ondo State, Nigeria. The descriptive survey research method was used in this study. Respondents were 99 prominent members of the SBM who were selected at random from nine public high schools. The School Based Management Questionnaire [SBMQ] and the Students' Academic Performance Inventory [SAPI] were used to gather information. The study was led by two research questions and one hypothesis. Percentage, mean, and multiple regression analysis were used to examine the data. According to the findings, the school-based management committee provided moderate contributions in all dimensions of the major functions performed throughout secondary schools. It was suggested that the government, through the Ministry of Education, reinvigorate SBM practise and prioritise the significant inputs of the school-based management committee in order to enhance the quality of decision-making and mobilise sufficient resources for infrastructure investment development and support for teachers' capacity training in order to enhance the quality of teaching-learning processes and students' academic performance in secondary education.

Sullyvan Garcia-Silva and Paulo Lima Junior, Since the 1980s, bullying in schools has been a research issue in Brazil, and it is one of the major difficulties that the national education system faces. The primary goal of this paper is to analyse the role of violence in schools experiences in the abandoning of a teaching profession. To that purpose, we interviewed a former teacher who, like many others, had quit teaching owing to mental weariness caused by school violence. Based on the research and the narrative inquiry of former teachers' accounts, we believed it was critical to recognise that school violence is both objectively controlled and subjectively perceived. While violence is an objectively controlled reality, it can be defined as a crime, incivility, or unequal treatment. We can discern distinct stages of trivialization as subjectively encountered experiences that, in Arendt's understanding, denote the superfluity and superficiality of social ties in totalitarian institutions. Together, the objective and subjective components form what we call the school violence matrix, which is an analytical tool that might be beneficial for examining how violence influences the trajectories of teaching professionals. Furthermore, the findings helped us understand how many school

agents contribute to the creation of school violence and how the individuals involved have opposing viewpoints. Finally, the consequences for teacher education are examined.

Timothy Köhler, Class size reduction is widely cited as a cost-effective method of improving student outcomes. Most research in South Africa suggest that larger class sizes are related with inferior educational achievements on average. This article examines whether the connection between classroom sizes and learner outcomes differs by school socioeconomic status using newly accessible data first from 2017-18 School Monitoring Survey including external administrative data. Despite the fact that large class sizes are more common in impoverished schools, class size is now only negatively connected with student outcomes in wealthy institutions. This discovery stands up to a number of robustness tests. This is not to say that class size is unimportant. Rather, in the South African context, reductions could be beneficial only after other school performance problems are addressed.

Dr. Serunjogi Charles Dickens (PhD), The study focuses on the function of School Management Committees (SMCs) and the efficacy of headteachers in government-aided elementary schools in Uganda's Luweero area. The research used a cross-sectional study design with both qualitative and quantitative data gathering and analysis methods. Purposive and cluster sampling procedures were used to choose a sample of 160 respondents, which included head teachers and members of the School Management Committee (SMC). Questionnaire forms and Focus Group Discussion (FGD) guidelines were used to collect data. The data found that SMCs performed above average in collectively attending to disciplinary reports, disciplining delinquent teachers/pupils, and distributing methods of managing responsibility to stakeholders, but scored below average in creating school rules and regulations. SMCs' poor performance in various areas was blamed to capacity deficiencies, a lack of desire, and disagreements among the school community [10].

Amna SAID AHMAD et al. The research investigates the function of school administrators in the process of utilising ICT in the learning process. The research was quantitative, employing an online poll for school administrators via a Google forum. In Israel, the surveys were sent to 40 Arab schools. The idea was that managers would struggle to integrate technical tools, and that change would require forethought. According to the survey findings, that there has been a change in schools since the Covid-19 crisis, with schools seeing an increase in the utilization of ICT in the educational process after the Covid-19 crisis. Another finding is connected to the obstacles noted by school administrators in adopting digital technology methods in schools, such as inexperienced instructors, a shortage of technical tools, infrastructural issues, and pupils without computers. The study makes various ideas for improving teaching utilising the hybrid model, while also boosting school administrators' responsibility and authority by offering greater pedagogical and management freedom, in order to increase their effectiveness and efficiency.

Ulfiah et al. The goal of this research was to look at the influence of school administration on early children mental health during the COVID-19 epidemic. This study approach employs quantitative research by performing a survey of family situations, physical and mental development, the influence of distant learning, and COVID-19 Indonesia-related topics. The results suggest that the degree of anxiety and despair is moderate, and it is fairly high for children who do not participate in any activities and just remain at home during the Covid 19 epidemic. These findings imply that school administration and parents are more innovative in offering activities and upgrading tactics. and activities that assist youngsters overcome boredom and are valuable in their social interactions with others their age.

3. DISCUSSION

Moral Values

The elementary school provides youngsters with the framework for learning moral principles. Along with the standard courses, the teachers emphasise the value of respecting people and their viewpoints. These factors are critical for general development, character development, and selecting the proper route.

Social Development

School is the initial place where kids are taught to socialise and communicate with new people, such as their classmates and instructors. Prior to this, people generally socialised with their parents, siblings, and relatives. They are introduced to a whole different world at school, where they acquire the art of socialising, playing, and sharing with others. That's also where students establish new friends, learn to help one another, engage in group activities, play a sport, and do a variety of other things.

Physical Aspect

When children attend school, they have the opportunity to participate in outdoor games and sports such as basketball, volleyball, as well as cricket. Because they are now running and playing, their bodies become more active, which aids in their physical development. Their muscles begin to grow. Furthermore, when they are exhausted at the ending of the day, it is simpler for children to sleep early.

Reading and Communication Skills

Children learn to read for the first time in primary school. Reading is regarded as one of the most beneficial activities for everyone, especially youngsters. It helps students see and imagine what they read, increasing their excitement and memory strength. Furthermore, they improve their speech and communication abilities.

Becoming Confident

When infants attend a reputable primary school, they are exposed to a favourable environment in which the instructors are properly trained. They develop and learn in a supportive and encouraging atmosphere, and a good school helps children become more self-assured.

Overall Growth

There was a period when schools' sole purpose was to educate the curriculum. Children used to study alphabets, spellings, and counting before moving on to arithmetic activities and historical chapters. But the situation has changed. Good schools prioritise children's full development. Aside from the fundamental curriculum, kids also learn to think outside the box, participate in creative activities, play memory games, and acquire new talents and interests such as sketching, painting, dance, sing, and much more.

4. CONCLUSION

Education is a fundamental human right that everyone should have in order to grow and develop in society as well as to make life easier. Education is essential in the life of a child since the appropriate education produces perfect citizens of the nation. Thus, the study's objective is to comprehend and enlarge on the significance of education in child growth and development for the welfare of society and thus the nation. There are several tactics and procedures that have been created to positively impact children's health and general growth. Thus, various specialists had diverse perspectives and thoughts on child development via

adequate education in order to produce an ideal citizen for the nation. As a result, education is the most crucial aspect in child development, and every kid must get an education as one of society's basic necessities. The research also aids in the development of various educational abilities for children in school, as well as improved learning skills to gain more knowledge.

REFERENCES

[1] S. O. Oyetola and G. Adio, "Roles of the School Library in Education of Nigerian Child," *Int. J. Res. Libr. Sci.*, 2020, doi: 10.26761/ijrls.6.1.2020.1310.

[2] H. Drew and R. Banerjee, "Supporting the education and well-being of children who are looked-after: what is the role of the virtual school?," *Eur. J. Psychol. Educ.*, 2019, doi: 10.1007/s10212-018-0374-0.

[3] M. Malta Campos and L. F. Vieira, "COVID-19 and early childhood in Brazil: impacts on children's well-being, education and care," *Eur. Early Child. Educ. Res. J.*, 2021, doi: 10.1080/1350293X.2021.1872671.

[4] DR. Sanchita Ranjan, "Importance of education for children," *INDIA Study Channel*, 2021.

[5] H. Seddighi *et al.*, "School-Based Education Programs for Preparing Children for Natural Hazards: A Systematic Review," *Disaster Medicine and Public Health Preparedness*. 2021. doi: 10.1017/dmp.2020.479.

[6] M. HAJAROH, R. Rukiyati, L. A. PURWASTUTI, and B. SAPTONO, "The implementation of indonesia's child friendly school policy based on environment in the coastal tourist area of Gunungkidul, Indonesia," *Geoj. Tour. Geosites*, 2020, doi: 10.30892/gtg.31312-535.

[7] G. Kokkalia, A. Drigas, A. Economou, and P. Roussos, "School readiness from kindergarten to primary school," *Int. J. Emerg. Technol. Learn.*, 2019, doi: 10.3991/IJET.V14I11.10090.

[8] F. Cabrera-Hernández and M. Padilla Romo, "Hidden violence: how covid-19 school closures reduced the reporting of child maltreatment," *Lat. Am. Econ. Rev.*, 2020, doi: 10.47872/laer-2020-29-4s.

[9] J. Marquez and G. Main, "Can Schools and Education Policy Make Children Happier? A Comparative Study in 33 Countries," *Child Indic. Res.*, 2021, doi: 10.1007/s12187-020-09758-0.

[10] S. C. Dickens and S. C. Dickens, "The Role of School Management Committees and Head teacher ' s Effectiveness in Government-Aided Primary Schools in Luweero District – Uganda The Role of School Management Committees and Head teacher ' s Effectiveness in Government-Aided Primary Schools in Luweero District – Uganda".

CHAPTER 22

A COMPREHENSIVE STUDY ON THE EDUCATION SYSTEM WITH THE HELP OF THE INTERNET OF THINGS (IOT)

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ABSTRACT:In today's teaching and learning, the internet plays a significant role in the age of the internet of things, there is no problem with time, distance, who and whom, or whether it is real or virtual (IoT). IoT technology makes several domains, including cities, homes, agriculture, transportation, and industry, more efficient and intelligent. In this paper, the author discussed that in today's world, IoT technology is crucial to creating a smart education system. In this paper, the author examines and thoroughly explores several IoT-based applications, including smart e-learning, smart classrooms, and smart libraries. The results show that people also go through the technology needed to make IoT-based education accessible to both urban and rural residents. In this paper after many literature reviews, the author concludes that we work to close the knowledge gap, identify innovative approaches that will empower people via the power of IoT, and integrate the information of countryside and urban students. The future potential of this paper is the IoT-based education system work effectively in a different manner and can help the students.

KEYWORDS: Classroom, Education System, Internet of Things (IoT), Internet,Teaching.

1. INTRODUCTION

The popularity of social connectivity among college students has grown over time, it becomes a way to stay in touch with friends both on and off campus. Many individuals find that social networking makes them feel like they are a part of a community. Economists and academics are debating whether its popularity of it will affect grades the amount of time spent on these websites has an impact on kids. Social networking, as used in this study, is defined as the usage of Facebook, YouTube, blogs, LinkedIn, Twitter, or Myspace. Considering that smartphones have internet access and people are worried about smartphones including social networking use of networking tools will impact pupils' grades [1], [2].

It is stated that the development and evolution of the Internet are exponential. The Internet has grown over the last 25 years, connecting people all over the globe through computers, laptops, cellphones, and other gadgets. Today, thanks to the development of the worldwide Internet, a variety of gadgets, including household appliances, automobiles, and many electrical. The Internet of Things (IoT) was created as a result of the ability of various smart gadgets and equipment to connect. IoT creates it conceivable for several real-world "things" to communicate with one another by employing Internet Protocol (IP) to reach customers over wired or wireless communication networks among themselves on the worldwide Internet. These are capable of observing their surroundings and taking independent action, and the physical environment about them into a remarkably vast information and communication foundation of information. Several phrases have their roots in the IoT literature. Specifically the Web, the Internet of Anything, and the World Wide Web of Everything Industrial Internet of Things (IIoT), Machine-to-Machine connectivity, or Internet of Things (IoT) [3]–[5].

In our everyday lives nowadays the internet is a significant factor, and this is crucial for everyone. We use the internet both for communication and for informational purposes. Things are linked gadgets to the World Wide Web that are not primarily operated by humans. The items might be a projector, laptop, smartphone, fan, lamp, or air conditioner. When we

link objects through the internet, the objects "the Internet of Things is a system that" uses sensors, software, electronics, and actuators to gather and share data. IoT acts as a link between the digital and physical worlds. IoT makes use of sensors and Radio Frequency Identification (RFID) [6], [7].RFID systems recognize and filter information and other pertinent information through a network. Humans use a sensor to gather and analyze the data which allows us to track developments in the physical state of objects. The next stage focuses on increasing the network's power. We make an effort to distribute processing power throughout the infrastructure. The last job will be to enable the network's tiniest objects to connect and communicate with one another the "internet of things" that are smart cities, homes with healthcare, farms, mobile devices, environmental monitoring, and schools. In smart homes the gadgets are linked to the internet, we can operate any kind of equipment based on its state. IoT in healthcare plays a critical function in monitoring body temperature, blood pressure, body glucose, and rehabilitative systems [8].

Surveillance, etc. strategies for analyzing noise, traffic jams, municipal energy use, and driver assistance systems make smart cities possible. IoT technology is being used in agriculture to enhance agricultural processes. We employ various IoT agricultural methods such as pH sensors, control pumps, and poly houses. Everyone needs to be educated. We can use more advanced technologies to provide everyone access to education. IoT is a superior approach. "The Internet of Things (IoT)" nowadays "is crucial for the school system educational" system IoT stimulates students' and instructors' interest in the education network of things and offers a brand-new instructional design that connects the "real world with the virtual world". IoT use nowadays is increasing, in the sector of education, particularly universities. Smart classes are only one of the IoT used in the educational system smart libraries, smart classrooms, smart attendance systems, etc. figure 1 embellishes the different factors that affect the education system.

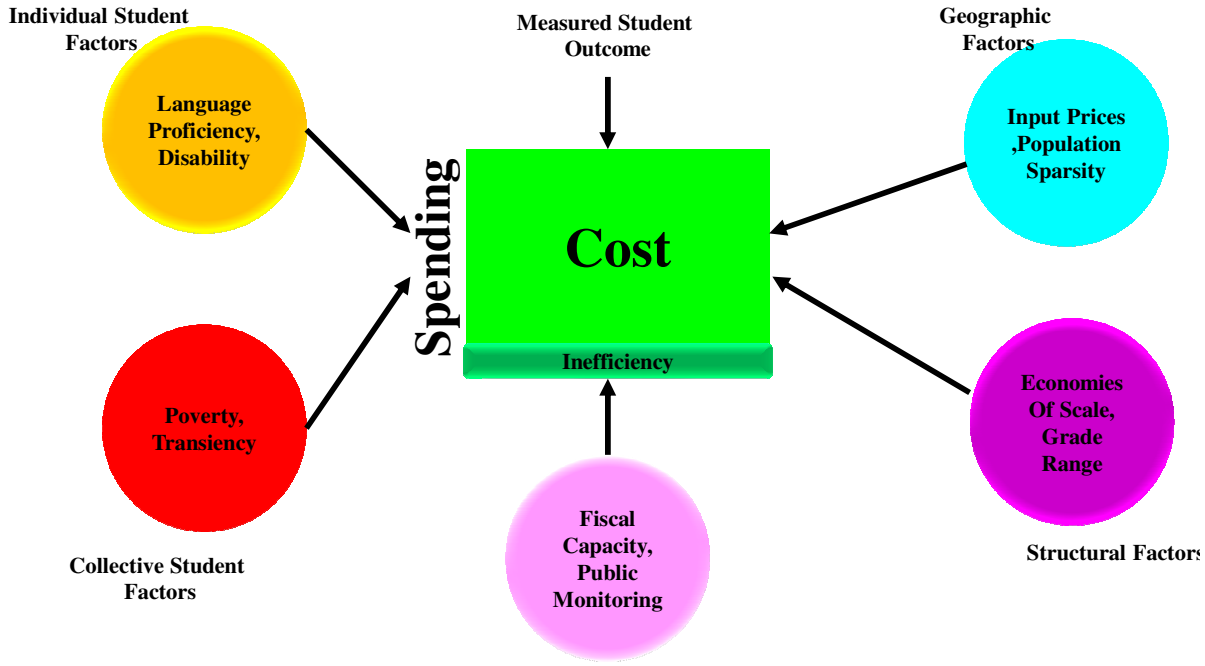

Figure 1: Embellishes the different factors that affect the education system.

The hardware and software components of smart classrooms come in many different forms. Projectors, laptops, smartphones, a wall show, smart boards, documentation cameras, VCRs,

and DVDs are some examples of the modules. Through smart classroom technology, lectures, presentations, and conversations may more fully delight students. Smart classrooms not only benefit students but also instructors obtain a stage to better showcase their lecture or presentation. IoT can make traditional classrooms smart and improve voice, dialogue, and movement. in the schools. It enables the lecturers to deliver their lectures, a quicker procedure, more planets, a presentation with more impact, and the chance for students to learn effectively both entertaining and fascinating. Below, we talk about two applications [9]–[11].

1.1.Intelligent Security System:

To gather data from each category in a smart surveillance system, it contains a microphone, camera, sound sensor, and PIR sensor the video format. The location where raspberry pi runs and manages motion detection. And surveillance utilizes cameras. The cloud stores the data that smart classrooms collect for later review. When a student fails to show up for class then, using a smartphone, users may simply get information on the courses.

1.2.IoT in Education:

IoT in education refers largely to the use of using information, technological smart gadgets in educational settings, both by students and teachers. Smart boards, which double as a surface for students to create on and display images and visuals relating to a certain subject, are among the tools utilised by contemporary educational platforms in lieu of traditional teaching aids. E-books that can be downloaded and have zooming and storing functions are also being used. These gadgets are linked to a centralized server, which controls and keeps track of the student's syllabus- and topic-based categorization. Figure 2 discloses the different effects of "the learning process in the education system" [12]–[14].

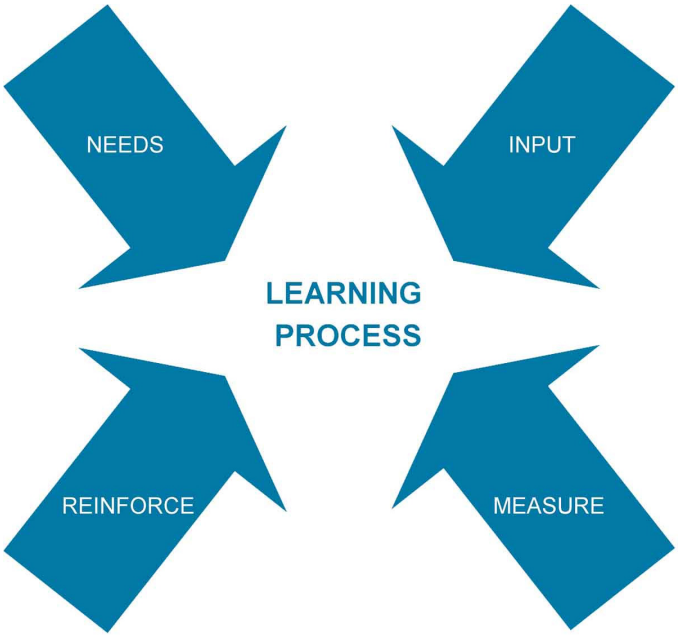

Figure 2: Discloses the different effects of the learning process in the education system [15]**.**

E-learning includes using the internet. E-learning improves the effectiveness of learning for both students and teachers. The majority of locations employ normal e-learning systems, but if IoT technology is included, the educational process will be improved even further. IoT-based e-learning platforms assist in gathering data from the devices linked to the prototype

system and sharing it practically and efficiently. The benefit of IoT-based e-learning systems is that they allow us to exchange class notes with people outside of traditional classroom settings. It establishes a stance learning where many students from various classrooms in various locations may easily study. Local and foreign students may become more competitive thanks to IoT-based e-learning systems. In addition, it will produce a setting for integrated classes. This system offers e-learning, digital libraries, user interface design, and course material.

Notes from the classroom will be compressed, and there will be a chance for any time anywhere access. We may use a smartphone app to put this into practice. The components of this paradigm are the environment, smart pedagogies, and smart learners mart educational setting includes software tools including communications, blog information, social networks, online resources, analytical tools, and virtualization technologies tools and equipment e.g., a smartphone, tablet, interface between the user, smart table, and e-bag, among other smart objects [16]–[18].

Anywhere, at any time, students may study. The knowledge-pull strategy has good teaching potential and individual knowledge. This method provides sufficient implicit and explicit information to the learner. It enhances their intrapersonal cross-functional and cross-knowledge network employing a range of network nodes, devices, and objects. The researcher will be able to build using a new approach, and students may learn more quickly and effectively. A student is referred to be a clever learner if using smart devices to communicate with the system.

Not only this, but earthquake alerts, voice-controlled systems for instructors, GPS-equipped school buses, smart surveillance systems, and speech-to-text note-taking apps for kids, tablets, and cellular phones with practices in the classroom are all changing how traditional schools and educational standards have always run. For the benefit of these features create favorable conditions, more useful, and more accessible for the kids, teachers, and parents. It is common knowledge that changing teaching methods and techniques overnight is not possible, but such gadgets are progressively being updated with the necessary software and tailored. In this situation, students may study conventional textbooks while also making use of IoT via the use of technology tools in the classroom that show “animated and 3D renditions of the material being covered to promote better learning”.

2. LITERATURE REVIEW

Miranda et al. in their study embellish that the industrial sector and many productive sectors have benefited from technological advancement and its fast growth. Education is one of the services sectors that has benefitted the most. In this paper, the author applied a methodology in which they stated that education is a phenomenon in this field that combines cutting-edge pedagogical techniques, best practices, and current and upcoming technology. The results show that education is defined and mapped higher education using the well-known phases of the four industrial revolutions. The author concludes that to build new initiatives in educational innovation, four key elements of Education are also suggested Competencies; Learning Methods; Communications and Information Technologies; and Infrastructure. Last but not least, three case studies used in Engineering Education show how the suggested composition [19].

Guo et al. in their study illustrate that China, the greatest developing nation in the world with the largest population, has achieved considerable strides in the development of education, which has significantly lowered poverty and increased wealth over the last several decades. In this paper, the author applied a methodology in which they stated that as education has

developed, several concerns and problems have arisen that have also received considerable study from academics in a variety of sectors, both in China and outside. The results show three study areas stand out among the many research themes Education return, student results, and educational equity are considered to be the most significant and well-researched topics. According to the author's conclusion, this work relies on both domestic and foreign research literature to explore topics related to educational improvements, such as college return, technical training, and curricular equality. Additionally, it offers suggestions for further study and application to advance education and build a sustainable future [20].

Chen et al. in their study embellish how education is being impacted by artificial intelligence (AI). The application of AI and its effects on administration, education, and learning were the main topics of the research. It was constructed using a framework for evaluating AI that was discovered during the early investigation. The author applied a methodology in which they stated that the study objective was successfully realized via the employment of a qualitative research strategy that made usage of the technique and design from the review study. The findings demonstrate that machines like computers, robots, and other artefacts now display intelligence comparable to that of humans, as measured by cognitive ability, learning, plasticity, and life-choice capabilities thanks to the area of research known as artificial intelligence and the inventions and advances that have followed. The author concludes that according to the report, "AI has been widely accepted and employed in education, especially by educational institutions, in a variety of ways" [21].

In this paper, the author elaborates on the best practices, as well as present and future technologies. The findings demonstrate that by utilizing "the well-known stages of the four industrial revolutions, education is defined and plotted concerning higher education". The author states that four critical components of education are also recommended to create new initiatives in educational innovation. Infrastructure, learning strategies, communications, information technology, and competencies. Three case studies from engineering education, which are only a few examples, demonstrate how the proposed content.

3. DISCUSSION

In this paper, the author discussed the different applications of the IoT embedded in education systems like automatic attendance recording, safety on the property, and distance education. IoT also improved collaboration and the productivity of the students.

3.1.Automatically Recording Attendance:

Teachers are concerned about student attendance, and in schools, this is a daily responsibility that cannot be substituted. The burdensome chore of tracking attendance and computing it for different reasons may be made easier with the aid of IoT. IoT can reduce this job during almost everybody's class. As students enter the classroom, their attendance may be automatically recorded using biometrics or a barcode system based on their identification card number. There is hardly any probability of inconsistency and storage in this manner. Such procedures may be improved by informing the boy's parents directly about their son's tardiness in class and raising their awareness of the problem. This will prevent the teachers from spending more time on their primary objective, which is instructing the students. The same feature may be used to track a teacher's attendance and the number of lectures they provide, and the school's support staff can register teachers' origin and destination times using their ID and fingerprints to ensure that everything is documented [22], [23].

3.2.Safety on the Property:

Most schools don't have the resources to identify warning signs of theft, abuse, nonconsensual, and other atrocities that may take place there, nor do they have a suitable

emergency plan in place. IoT may significantly contribute to the resolution of these problems since, if any objectionable action due to a network system that enables the video footage to be presented on several monitors across the area, it can be immediately addressed once it is noticed by the camera. In the case of a fire or phase separation, IoT-based sensors may inform alarms with the exact location of the problem, making restoration less difficult and harmful. Additionally, sensors in the school's smart door lock allow for the automated calling of assistance and activation of warnings if someone attempts to break in. This would not only ensure safety but also provide management systems, which sometimes deal with such issues, a break. Figure 3 embellishes the different applications of IoT that can be used in the education system.

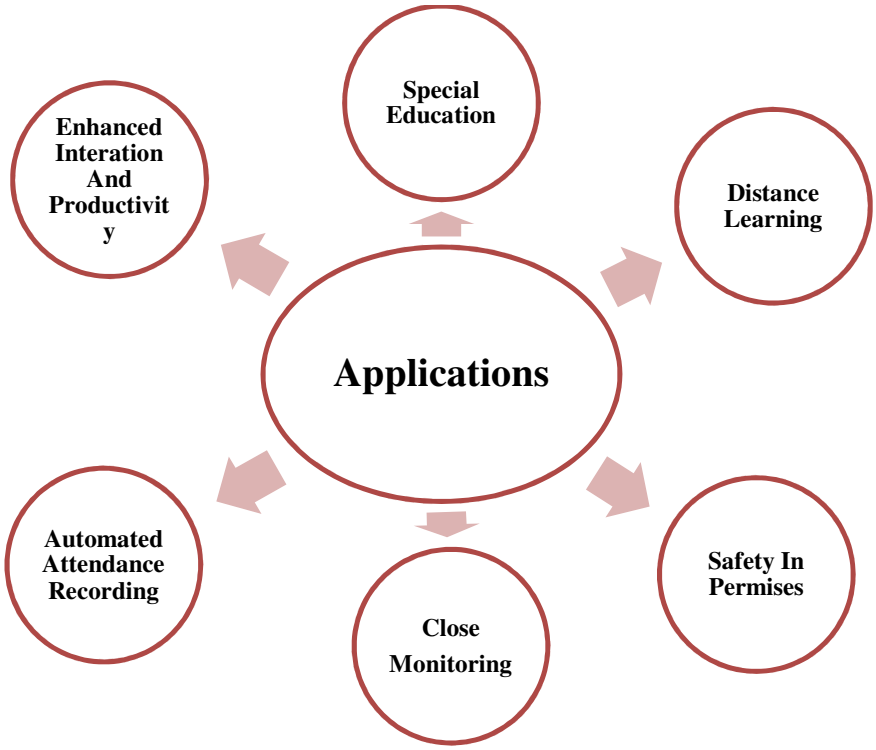

Figure 3: Embellishes the different applications of IoT that can be used in the education system.

3.3.Distance Education:

Home automation systems gather and form data in form of an application with graphical user interface and in the context of an online platform sign-in feature that enables anyone from any place to access that through a user id and login information that can be made available by the university to its distance learning students. This may assist anybody who wants to complete their educational program but is unable to enroll in a legitimate educational institution. Live courses, recorded lessons, timer-based online assessments, and monitoring of portal use may all contribute to a holistic strategy for distant learners. Making materials available online and using open booklet-based evaluation throughout the COVID19 epidemic has allowed students to continue with their coursework for junior courses and mid-year semesters without missing a beat.

3.4.Improved Collaboration and Productivity:

Students get more engaged while taking lessons using virtual applications on their smartphones. When they are able to completely comprehend a greater degree of clearly, as

previously said, they are also capable of thinking beyond the confines of the classroom, communicating, and expressing their comprehension and doubts. Students may become more eager to engage in assessments, assignments, and even self-learning via interaction-based learning by inputting data on books to access the equivalent digital version. They may also access the available resources from their teacher's website and examine the content at their convenience. The whole procedure is designed to both increases the pupils' productivity and skill level.

3.5. Augmented Reality (AR)-Ready Systems:

With the use of technological tools, augmented reality may be described as an improved version of the actual world that is provided in a more intelligible manner. The usage of AR may increase the efficiency of IoT-based systems and devices. Students can get accurate marks and information simply by scanning a barcode next to the subject they are studying. When integrated with a software system, augmented reality (AR) may provide greater information and 3D views of the subject being taught. For instance, animated explanations of the anatomy of the human ear are more understandable than theoretical ones spoken aloud in class. The management authorities may slowly and gradually update these study materials in the teaching and learning site, allowing the students to locate and see animated portrayals of the themes wherever they see appropriate.

3.6.Particular Education:

Getting a regular and thorough education for kids with special needs used to be almost impossible and comparably difficult.

The academic curriculum is changing, and the classroom environment is being made rely on synthetic and illuminance with the use of IoT equipment and electronic items, in order to fulfil the particular needs of the children with sensory disorders. They can employ the technology of controller gloves and a tablet, for instance, to create a vocal speech that is translated from sign language, which the instructors may use to teach the ideas expanded to what is described in the books.

3.7.Close Observation:

There is always the possibility to track the actions and spending time of the students on a certain subject, whether the online portal is utilized inside of the school or from someplace else. The Internet of Things in teaching sensors gathers data and automatically recommends academic subjects that students may find interesting for further study [24], [25]. Additionally, it is simple to identify who participated in which evaluation, and progress may be monitored along with scoring. Insofar as students' cellphones linked to school wireless fidelity (Wi-Fi) networks may access the internet for a specified use application created for the specific purpose, this helps avoid the consumption of misappropriation and unneeded activities. Additionally, devices may be modified and created in such a manner as to only support certain systems and apps when equipped with built-in security and instructor monitoring tools. Figure 4 discloses the total Revenue from the IoT and its mobile share in different years.

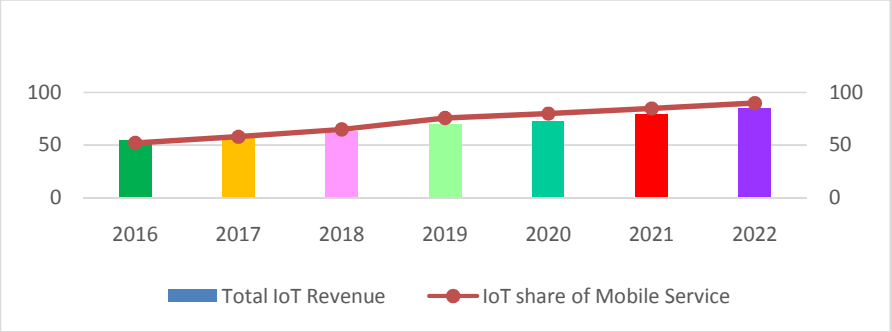

Figure 4: Discloses the total Revenue from the IoT and its mobile share in different years.

4. CONCLUSION

The several ways that IoT technology is being used in the realm of education have been discussed in this paper. The deployment of IoT tools in the sectors of education, such as teaching and learning, in different corners of the world teaching and learning, was the focus of the innovations suggested by many writers both consumer green education and medical science education. The connections the relationship between the IoT and cloud computing framework in the field of education has also been discussed.The research gave us the unmistakable impression that IoT may transform the traditional educational system and contribute to its smarter development. We have the option of smart classrooms, smart attendance systems, smart libraries, etc. in today's IoT-based educational system. We attempted to synthesize many Internet of Things (IoT)-based applications from this research that are utilized to construct a smart education system. This study offers crucial applications and technology needed to create a smart education system, and it will aid academics in coming up with new IoT-based applications and cutting-edge technologies. It may be concluded that the effectiveness of the learning and teaching process can be considerably improved by using the resources and capacities of IoT technology. Additionally, research might be done within the context of some novel IoT-specific technologies that may be helpful for all schooling.

REFERENCES

[1] N. P. Morris, M. Ivancheva, T. Coop, R. Mogliacci, and B. Swinnerton, "Negotiating growth of online education in higher education," *Int. J. Educ. Technol. High. Educ.*, vol. 17, no. 1, p. 48, Dec. 2020, doi: 10.1186/s41239-020-00227-w.

[2] M. E. Oswald-Egg and U. Renold, "No experience, no employment: The effect of vocational education and training work experience on labour market outcomes after higher education," *Econ. Educ. Rev.*, vol. 80, p. 102065, Feb. 2021, doi: 10.1016/j.econedurev.2020.102065.

[3] C. Boyle and J. Anderson, "The justification for inclusive education in Australia," *Prospects*, vol. 49, no. 3–4, pp. 203–217, Nov. 2020, doi: 10.1007/s11125-020-09494-x.

[4] D. Sharma and S. Bhaskar, "Addressing the Covid-19 Burden on Medical Education and Training: The Role of Telemedicine and Tele-Education During and Beyond the Pandemic," *Front. Public Heal.*, vol. 8, Nov. 2020, doi: 10.3389/fpubh.2020.589669.

[5] N. Thi To Khuyen, N. Van Bien, P.-L. Lin, J. Lin, and C.-Y. Chang, "Measuring Teachers' Perceptions to Sustain STEM Education Development," *Sustainability*, vol. 12, no. 4, p. 1531, Feb. 2020, doi: 10.3390/su12041531.

[6] D. Black, C. Bissessar, and M. Boolaky, "Online Education as an Opportunity Equalizer: The Changing Canvas of Online Education," *Interchange*, vol. 50, no. 3, pp. 423–443, Aug. 2019, doi: 10.1007/s10780-019-09358-0.

[7] J. J. B. Joaquin, H. T. Biana, and M. A. Dacela, "The Philippine Higher Education Sector in the Time of COVID-19," *Front. Educ.*, vol. 5, Oct. 2020, doi: 10.3389/feduc.2020.576371.

[8] S. Palvia *et al.*, "Online Education: Worldwide Status, Challenges, Trends, and Implications," *Journal of Global Information Technology Management*. 2018. doi: 10.1080/1097198X.2018.1542262.

[9] B. M. Kyaw *et al.*, "Virtual reality for health professions education: Systematic review and meta-analysis by the digital health education collaboration," *Journal of Medical Internet Research*. 2019. doi: 10.2196/12959.

[10] R. R. Hermann and M. B. Bossle, "Bringing an entrepreneurial focus to sustainability education: A teaching framework based on content analysis," *Journal of Cleaner Production*. 2020. doi: 10.1016/j.jclepro.2019.119038.

[11] R. van Kessel *et al.*, "Inclusive education in the European Union: A fuzzy-set qualitative comparative analysis of education policy for autism," *Soc. Work Public Health*, 2021, doi: 10.1080/19371918.2021.1877590.

[12] N. Altwaijry, A. Ibrahim, R. Binsuwaidan, L. I. Alnajjar, B. A. Alsfouk, and R. Almutairi, "Distance education during covid-19 pandemic: A college of pharmacy experience," *Risk Manag. Healthc. Policy*, 2021, doi: 10.2147/RMHP.S308998.

[13] R. Ayala, "Zooming in on virtual education: biopolitics and student-centred learning," *Educ. Medica*, 2021, doi: 10.1016/j.edumed.2021.01.004.

[14] S. Sukumar, S. A. Dracopoulos, and F. E. Martin, "Dental education in the time of SARS-CoV-2," *Eur. J. Dent. Educ.*, 2021, doi: 10.1111/eje.12608.

[15] M. N. Mikhaylovsky, L. Z. Karavanova, E. I. Medved, N. A. Deberdeeva, L. M. Buzinova, and A. A. Zaychenko, "The Model of STEM Education as an Innovative Technology in the System of Higher Professional Education of the Russian Federation," *Eurasia J. Math. Sci. Technol. Educ.*, 2021, doi: 10.29333/ejmste/11173.

[16] P. Maneejuk and W. Yamaka, "The impact of higher education on economic growth in asean-5 countries," *Sustain.*, 2021, doi: 10.3390/su13020520.

[17] J. Wagner, "Financial education and financial literacy by income and education groups," *J. Financ. Couns. Plan.*, 2019, doi: 10.1891/1052-3073.30.1.132.

[18] J. Miron, S. E. Eaton, L. McBreairty, and H. Baig, "Academic Integrity Education Across the Canadian Higher Education Landscape," *J. Acad. Ethics*, 2021, doi: 10.1007/s10805-021-09412-6.

[19] J. Miranda *et al.*, "The core components of education 4.0 in higher education: Three case studies in engineering education," *Comput. Electr. Eng.*, vol. 93, p. 107278, Jul. 2021, doi: 10.1016/j.compeleceng.2021.107278.

[20] L. Guo, J. Huang, and Y. Zhang, "Education development in China: Education return, quality, and equity," *Sustainability (Switzerland)*. 2019. doi: 10.3390/su11133750.

[21] L. Chen, P. Chen, and Z. Lin, "Artificial Intelligence in Education: A Review," *IEEE Access*, 2020, doi: 10.1109/ACCESS.2020.2988510.

[22] D. Cox and S. Prestridge, "Understanding fully online teaching in vocational education," *Res. Pract. Technol. Enhanc. Learn.*, 2020, doi: 10.1186/s41039-020-00138-4.

[23] P. Lall, R. Rees, G. C. Yi Law, G. Dunleavy, Ž. Cotič, and J. Car, "Influences on the implementation of mobile learning for medical and nursing education: Qualitative systematic review by the digital health education collaboration," *J. Med. Internet Res.*, 2019, doi: 10.2196/12895.

[24] M. Lackéus, "Comparing the impact of three different experiential approaches to entrepreneurship in education," *Int. J. Entrep. Behav. Res.*, 2020, doi: 10.1108/IJEBR-04-2018-0236.

[25] A. Shutaleva, Z. Nikonova, I. Savchenko, and N. Martyushev, "Environmental education for sustainable development in Russia," *Sustain.*, 2020, doi: 10.3390/su12187742.

CHAPTER 23
APPLICATION OF TECHNOLOGY IN THE EDUCATION SYSTEM IN THE DIFFERENT COUNTRIES

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ABSTRACT:School and education are a must in all countries as literate citizens are the pillars of the nation that accomplish its prosperity. The use of technology is now increasing as different platforms are using the technology for various applications. The author focusses to apply the technology in the education system for the betterment of the knowledge grasping capacity of children in the school as well as to make them experts with proper guidance. The use of IoT and Artificial intelligence in learning helps to improve the education system for better reach to the students in the different parts of the world. There are different studies made by different experts in the different parts of the world which explain the importance of technology in the education system and how it helps the child in studies so that parents, as well as teachers, can supervise the progress of the child. It helps in developing advanced technology schools all over the world so that no distance barriers in the education of the child and teachers for learning different skills.

KEYWORDS: Education, Information Technology, Learning, Nation, Student.

1. INTRODUCTION

Technology is currently the most important criterion for growth and progress, and education is a way of understanding and obtaining new technology. The first step for a civilization that wants to grow via knowledge and technology is to change the educational system [1],[2]. The nation must use educational technology, i.e., planned development, execution, and assessment of essential, to achieve this. Taking into account research and information regarding the expansion of IT (Information Technology) in education throughout the world, it'll discover that many established and emerging nations have enacted elaborate programs to equip schools with technology like internet access and computers [3],[4].Studies conducted in education are one of the ways we may support educational systems in removing their flaws and shortcomings. Comparative educational technology is defined as the process of identifying and comparing the theoretical and practical aspects of education across nations, regions, and countries in order to advance and advance learning [5],[6]. Kids in impoverished nations may not always benefit from technologies of information and communication that seem to be successful for teaching students throughout the industrialized nations.Anecdotal data, for instance, demonstrates that well-intentioned learning tools in underdeveloped nations fall short for straightforward causes like teachers who are reluctant to utilize the equipment out of concern that they could damage something. These limitations cannot be disregarded [7],[8]. Instead of simply adopting technologies from the developed world, academics need to look at the limitations of education technology in each nation.

It evaluates these educational needs across nations and looks at areas where technology may be used as a part of a potential remedy [9],[10]. It also covers the educational challenge and potential for the developing world on the economic, social, geopolitical, and cultural levels. The range of technology's possible uses grows as it develops[11],[12]. Technology has transformed into an ever-more-basic component of the delivery and expansion of educational services over the last few decades, as well as the education sector is no different. Investments through educational technology, or EdTech, are seen as a viable alternative to improve these results in light of recent extensions of the educational systems throughout many developing countries and the trailing performance in terms of learning, persistence, graduation rates, especially socioeconomic equity.Any use of electrically-powered technology in education that was not generally accessible to the general public in prior decades is specifically defined

as EdTech. This includes, among other things limited to, distributing already existing technology, offering devices with custom software, modifying previously existing and have already owned technology, or utilizing specialist software on shared computers. The current research makes an effort to represent the breadth and complexity of the contemporary landscape of EdTech across developing nations, taking into account not only the actual goods but also the marketplaces, nations, and target people.Governments and educational stakeholders should be aware of the kind of EdTech initiatives that have shown the most promise for various outcomes, populations, and situations before adopting and modifying them. Finding and assessing every piece of existing EdTech content is not an easy task for scholars and practitioners alike, given the broad and developing nature of the EdTech subject.

The present paper is a study about the technology is currently the most important criterion for growth and progress, and education is a way of understanding and obtaining new technology. This study is divided into several sections, the first of which is an introduction, followed by a review of the literature and suggestions based on previous research. The next section is the discussion and the last section is the conclusion of this paper which is declared and gives the result as well as the future scope.

2. LITERATURE REVIEW

Olga I. Vaganova [13] et al. have explained that the goal of contemporary higher professional education is the development highly competent specialists. The study's objective was to describe the experience of employing multimedia technology to instruct students at a pedagogical institution. The investigation of these technologies' effects on students' education and motivation while researching the "technology of teacher education of a past" department (media technologies have been embedded in the discipline content.It was found that while the number of "acceptable" ratings declined, the percentage of "outstanding" reviews climbed noticeably in 2018. The collected data made it possible to identify improvements brought about by the integration of multimedia technology into the teaching and learning process. Since multimedia technologies were shown to be highly effective, their use in the instruction of students at pedagogical universities will continue.

Olga Shatunova [14] et al. the purpose of this effort is to provide a framework for STEAM education that is centered on project-based learning in so-called creative spaces. In order to structure technical disciplines, art, and creative activity into a single integrated program, it evaluated the experiences of several nations in the adoption of STEM and STEAM-education. According to an analysis of experimental work's findings, students can develop the skills and competences required for Industry 4.0 by implementing project activities in "creative spaces" and include the subcategory "art" in their content. In conclusion,this assistance should be provided through focused development programs, which should also actively include mentors and graduates in project activities.

Veljko Aleksić and Dionysios Politis [15] has purpose is to give a quick overview of virtual reality technology's properties and existing educational potential. Researchers that concentrated on secondary education found some promising outcomes when utilizing VR as a supplemental tool, which appears to work well for younger kids. Students' engagement in the courses as well as their exam results rose thanks to the usage of VR. This topic should be investigated further, along with the usefulness of VR technology among secondary and tertiary students. Although school stakeholders and politicians don't often consider virtual reality (VR) technology as a formal teaching tool, its growing accessibility will enable much more informal use and experimentation in education. In conclusion,over the past ten years, VR technology has evolved significantly, but the corpus of academic research is unable to maintain abreast with this rapid advancement.

Erika E. Smith [16] et al. have propose a different strategy for integrating technology into professional education settings that tries to avoid negative perceptions about "digital natives" and instead promotes the growth of digital literacy via the use of technological capabilities. Learners may successfully accept and use emerging technologies using professional digital practices by developing digital literacy across the procedural and technological, cognitive, and sociocultural dimensions linked to professional competences. Its methodology aims to identify and link fundamental affordances and professional competences with procedural, technological, cognitive, and sociocultural electronic literacies associated to technology in order to promote professional digital behaviors that are essential in today's environments for the healthcare profession. In conclusion,particularly within professional education contexts, aligning technological affordances alongside pedagogical tactics can promote the critical knowledge and skills required for effective and meaningful incorporation of technology.

Robin Castro [17] has explained that with regards to technological developments in particular, education is a complex system that need numerous viewpoints and levels of study to comprehend its contexts, dynamics, including actor interactions. It aims to pinpoint some of the most promising developments in blended learning implementations within higher education, as well as the technological capabilities and the circumstances in which they are used. It was found that the quick technological advancement in response to societal needs had given birth to a number of difficulties, and the present digital transition had put higher education systems under additional strain. Universities and businesses that provide instructional material and alternative technical solutions have shown tremendous interest in these new technologies, which has sped up the development of network alliances among these players.

The above study a different strategy for integrating technology into professional education settings that tries to avoid negative perceptions about digital natives and instead promotes the growth of digital literacy via the use of technological capabilities. In this study, the author discusses the justification for ICT integration in education and IT is essential in education.

3. DISCUSSION

Major benefits have been brought about by the advancement of technology globally. In addition to improving efficiency, technology has made the globe a smaller place and made it simpler to obtain information. The use of technology's rich resource base has not been overlooked by the educational sector. Information technology is now used in education on a regular basis. The participants in the education industry have discovered methods to use information technology into routine learning activities for optimal learning. A widely used educational tool, information technology is intended to improve the efficiency and effectiveness of both the educational system.Computers are mostly utilized to enhance the educational process. New kinds of education include remote training and online learning. Additionally, schools should deploy technology that is user-friendly for parents as well as students. They may utilize an online app and web site to pay fees instead of wasting valuable time, and they can see a daily report on pupils directly online.The factory-inspired educational system popular in the 19th century made sense when there was significant resource constraints. But by utilizing three of its distinguishing characteristics perception, recognition, and recommendation AI may assist us in overcoming such limitations, resulting in tailored learning for students and much more free time for teachers in Figure 1.

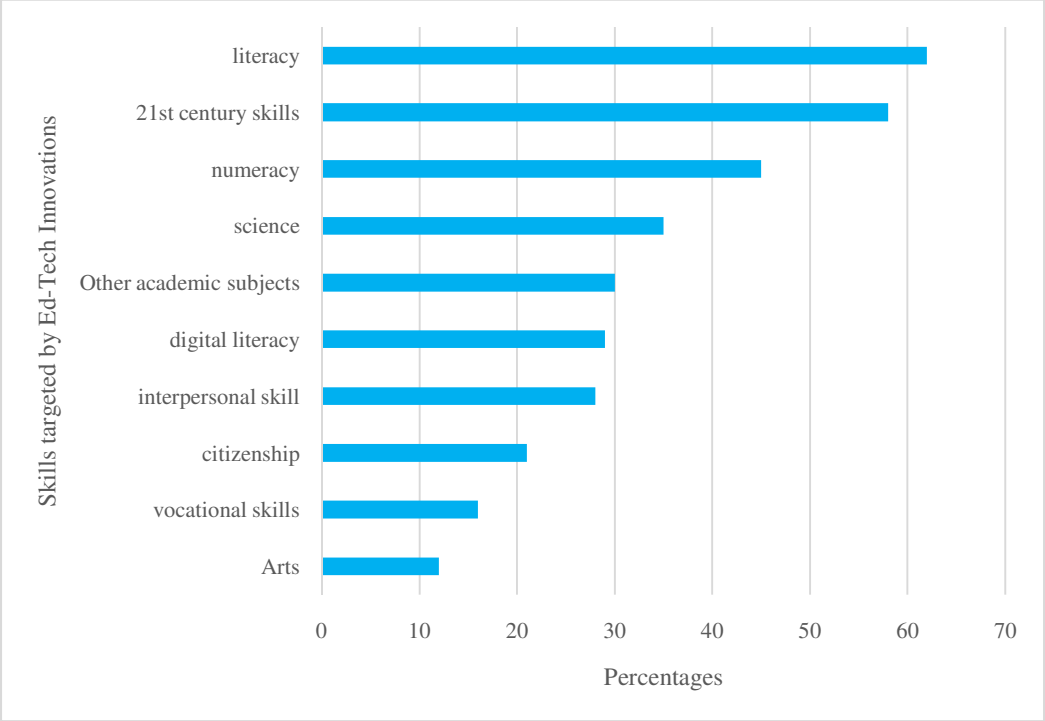

Figure 1: Illustrates the Skills targeted by Ed-Tech Innovations.

3.1. Ed-Tech address in developing countries:

Although this is not a complete list of all policy issues affecting the school institutions of developing nations, every one of them has the potential to be improved by well-planned Ed-Tech initiatives. More significantly, these flaws might be the cause of the learning crisis, which is the most prevalent evidence that educational institutions in developing nations need to be improved. As a result, they are crucial objectives to bear in mind while creating an Ed-Tech intervention. The issue that many students in poor nations who attend school learn little throughout their years in these institutions is known as the learning crisis, in particular.This stands in sharp contrast to the advancements made in previous decades regarding enrolment and anticipated years of schooling per child [18]. The majority of policy solutions now place more of their emphasis on raising learning levels in emerging nations rather than seeking to expand enrolment in education systems without learning. In fact, the World Bank now is issuing a measure of "learning poverty," or the proportion of kids who still don't meet the minimal reading proficiency requirement at the end of elementary school, in an effort to formalize the measurement of the learning issue. Unbelievably, one in two children globally live in "learning poverty," with a distribution largely favoring low-income nations.Learning poverty is nearly universal in West African nations like Chad, Niger, and Mauritania; it is 87% in Sub-Saharan nations, and even in middle-income nations like Argentina, Brazil, or Columbia, learning poverty affects about half of all children (World Bank19). The probable causes of these poor accomplishment levels are discussed below, along with several areas where Ed-tech might significantly enhance education in developing nations.

3.2. Justification for Information and Communications Technology (ICT) Integration in Education:

Instead of being thought of as a replacement for in-person instruction, technology in education should be seen as a way to "attain specific goals that haven't been attained effectively anything other than that: policy has evolved, ensuring equal, trying to improve the

organisational effectiveness of school institutions, enhancing education quality, and preparing new and old generation after generation for a technology-driven global market. Both educational community and society can benefit from technology in education in the ways listed below:

- An improved atmosphere for learning. Technology offers a stimulating learning environment that enables students to actively participate in their education. According to evidence, students can profit from technology in the classroom's pedagogical advantages provided it is used effectively. Experts today are more and more in favor of using the constructivist model of learning as opposed to the more conventional instructivist paradigm.
- An effective tool to support classroom instruction by teachers. Technology may increase students' interest in learning if it is utilized by teachers in the right way, and it can also be used by educators to teach their specific topics. Technology has the ability to simplify, challenge, and motivate instructors' lessons.
- A management tool for administrators and educators. In addition to teaching in the classroom, teachers are also responsible for administrative tasks like maintaining student records, planning lessons, creating handouts, tutorials, and slides, creating exam papers, marking documents and recording results, conducting various statistical models on grades, and so forth. The determination of student achievement for a specific year, the maintenance of employee data, and the creation of school budget are all tasks that administrators were involved in. As a result, technology may become a very helpful tool for addressing a variety of administrative responsibilities for both administrators and teachers.
- Greater educational accessibility and inclusive instruction in the classroom. All students have been incorporated into an incorporated school community regardless of their cultural, ethnic, and socioeconomic origins, in addition to their strengths and deficiencies in any area. It is well acknowledged that technology may be used to support schools in achieving equitable access to education. Additionally, it has the ability to provide kids with impairments with more access to school.
- A system for communication. Geographical distance used to be a significant barrier to communication with individuals all around the world. Then, technology altered that. Communication with everyone on the planet is now feasible because to networks and the Internet. Additionally, technology has provided schools with a fantastic platform for exchanging knowledge and expertise. Through the utilization of technology, students, instructors, and administrators may interact, share work through collaborative projects, meet peers and experts, and discuss information and concerns.
- A way to get work and an advantage in the global market. A workforce with computer literacy is becoming more and more in demand in the labor marketplaces of developed and developing nations. The ability to utilize a computer and have basic computer literacy will soon be necessary for both landing a job and competing for a piece of the global market. Technology in education may help kids today become competitive and work-ready tomorrow.

Countries with the Best Education System in the World:

The world's top educational system is: Every person of every nation has the fundamental right to an education, just as they have to healthcare and food. Nobody should be prevented from pursuing an education by the forces of nature because, to put it simply, knowledge is

power. It is very disturbing and regrettable that nations fight elections on unimportant issues like warfare and religion while never focusing on education. However, this shouldn't be an excuse for people to give up on their battle for the free and equitable education they deserve in Figure 2. Many nations throughout the globe have made free education for their residents. Because a citizen with a good education may honor their nation and alter the fundamentals of our society.

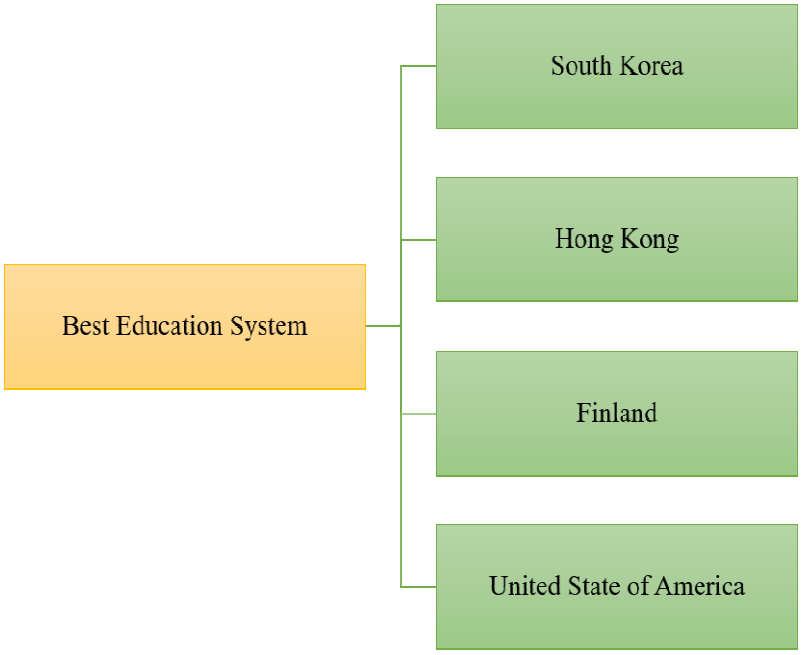

Figure 2: Illustrates the best education system in the world.

3.3. IT is Essential in Education:

The various region why the technology are need in education:

3.3.1. Access to learning the material:

The student may access and use a ton of learning resources on the internet to augment what is taught in the classroom. Students can take use of the e-books, study aids, and sample test questions that are accessible on the Internet to expand their knowledge. Students can use computers and the internet in educational institutions for this purpose.

3.3.2. Continuous learning:

That don't need to be in a classroom to study in the modern world. Students may now continue to study no matter where they are thanks to the use of information technology in the classroom. Learning doesn't have to stop since instructors may email tasks to students, who can finish them and turn them in without ever entering the classroom. Even while they are at home, students may continue their education. As a result, the efficiency of the education system has considerably increased.

3.3.3. Sharing of knowledge:

Students can exchange knowledge, participate in intellectual disputes, and generally educate from one another using online discussion boards. Despite the physical barriers, using information technology in education have essentially made it feasible for students from various parts of the world to come together and exchange experiences. Students' increased

understanding of cultural variety as a result of using information technology in the classroom has led to a more tolerant and cohesive global community.

3.3.4. Using audio and visual material as learning helps:

Tutors may now instruct pupils considerably more readily because to the usage of information technology in education. Students can have a deeper knowledge of the subjects being taught by integrating audio and visual elements. Demonstrations and adding a practical component to the material presented in class are now significantly easier to carry out. Therefore, slow learners have a chance to catch up to those who first understood what was being presented in class.

3.3.5. Distance learning:

Learning institutions have included the utilization information technology in education to appeal to this new demography in order to adapt to a changing population with specific needs. The majority of the working and youthful population may now return to school and get second degrees for additional certifications thanks to online courses. Anyone may enroll in a college abroad at their own leisure without ever leaving your native country.

3.3.6. Proper record keeping:

Using technology, it is feasible to maintain student records in a way that is both more organized and safe. When records were stored manually in the past, there were many instances of lost files, but now that information technology has been included into education, it is easy to preserve records safely and correctly. As a result, finding information has gotten considerably simpler.

3.3.7. Video Conferencing Tool:

Teachers may easily organize virtual classrooms and provide students with high-quality learning experiences from anywhere at any time thanks to video conferencing technology. In addition to this, it enhances communication between parents, administrators, and other staff members by making it simple to organize PTA meetings, conferences, training sessions, and other events without needing everyone to be there in person.

3.4. Technology and Education in Emergencies:

Technology may deliver education outside of the traditional classroom, particularly in times of humanitarian crisis like war or natural catastrophes. The demand for education outpaces the availability of facilities, instructors, materials, and other resources during times of crisis. Without the need for a focus on youth and greater possibilities for them to acquire and develop the abilities they will need to sustain themselves and young families in the future, for instance, it would be impossible to rebuild Syria and stop fresh violence. The Global Business Partnership for Education evaluated the possibilities of technology to provide education to Syrian refugees in a paper titled It Support Their World. It provided various suggestions, like as:Consider technology as a tool, not a panacea. Encourage a range of strategies to supplement access to traditional schooling Increasing Internet and technology tool access Boost program coordination, monitoring, and assessment Program credibility without accreditation Interact with the host's economic and policy restrictions, labor market inclinations, open-source development, including user-generated material, if applicable.

3.5. New Technology Skills:

Many of the employment that are accessible now could be obsolete in ten years. More students will need to graduate from school with the technology skills required for the future economy due to causes like rising automation and other considerations. The abilities needed

for the positions that have not yet been established must be taught to students. Far-reaching advancement is needed to equip younger generation with both the newly acquired skills and knowledge those who need for the modern economy, and provide schooling to 2.5 million more young kids effective and efficient manner, to utilize the latest technology, as well as to take advantage of emerging comprehension of how children learn, the Education Commission, a collective of world leaders and specialists formed to look into how deliver education for children by 2030, stated inside its September 2016 report.Participating in the global economy requires having digital abilities. Even the most underdeveloped regions of the globe now have access to mobile devices, yet there are still skills shortages, and pupils in schools are frequently taught things that would prevent them from getting employment in the STEM fields (Science, Technology, Engineering, and Math). Technology deployment has the danger of favoring young people in wealthy nations while leaving others in low-income nations behind in terms of acquiring the skills required for the new economy.According to the Education Commission, generally new technologies are created for people who currently have some access instead of being intentionally prioritized for the most disadvantaged. As a result, several projects over the past ten years have fallen short of expectations. Fortunately, there is a shift toward technology usage in education that is more thoughtful.

4. CONCLUSION

The emphasis on social learning is related to the subject of utilizing technology in developing nations. Since solving contemporary problems frequently requires real-time answers over extended periods of time rather than solutions by lone individuals during brief and finite periods of time, social learning is crucial for citizens inside of an information society. Communities need to build information and learn about one another, and students need to study within those communities. Collaboration tools now have a greater significance for the education of the future. Mobile and wireless gadgets allow for anytime, everywhere social connections between students and distant information access.These tools enable a range of activities, including peer dialogues, physical environment exploration and study, data capturing (sounds, photos, videos, text, locations), and publishing (of captured data). Mobile tools are "fun," in the sense that they facilitate "learning-in-context" and "consistency between contexts," elements of learner ownership and management that give learners control. Furthermore, peer collaboration, student access, personalization, and engagement are all benefits of mobile learning. But in many cultures, opposition and national traits could prevent the use of technology for social learning.The availability of teacher training, which may be restricted in some nations, is a crucial element of collaborative teaching. In addition, it is extremely difficult to organize collaborative activities due to the size of the classes and the absence of Internet connection. However, widespread and inexpensive mobile devices provide fresh options.

REFERENCES

[1] E. Dinc, “Prospective teachers’ perceptions of barriers to technology integration in education,” *Contemp. Educ. Technol.*, 2019, doi: 10.30935/cet.634187.

[2] C. R. Jiménez, M. S. Prieto, and S. A. García, “Technology and higher education: A bibliometric analysis,” *Educ. Sci.*, 2019, doi: 10.3390/educsci9030169.

[3] M. N. Malik, H. H. Khan, A. G. Chofreh, F. A. Goni, J. J. Klemeš, and Y. Alotaibi, “Investigating students’ sustainability awareness and the curriculum of technology education in Pakistan,” *Sustain.*, 2019, doi: 10.3390/su11092651.

[4] K. Volk, “The demise of traditional technology and engineering education teacher preparation programs and a new direction for the profession,” *J. Technol. Educ.*, 2019, doi: 10.21061/jte.v31i1.a.1.

[5] Z. V. Smirnova *et al.*, “Modern communication technologies in professional education,” *Int. J. Innov. Technol. Explor. Eng.*, 2019, doi: 10.35940/ijitee.K2110.0981119.

[6] D. D. Gill, "A technology education teaching framework: factors that support and hinder intermediate technology education teachers," *Int. J. Technol. Des. Educ.*, 2019, doi: 10.1007/s10798-018-9465-0.

[7] A. Irina, B. Irina, G. Anastasia, and D. Elena, "Active learning technologies in distance education of gifted students," *Int. J. Cogn. Res. Sci. Eng. Educ.*, 2019, doi: 10.5937/ijcrsee1901085A.

[8] J. Buckley, A. O'Connor, N. Seery, T. Hyland, and D. Canty, "Implicit theories of intelligence in STEM education: perspectives through the lens of technology education students," *Int. J. Technol. Des. Educ.*, 2019, doi: 10.1007/s10798-017-9438-8.

[9] D. Calderón-Garrido, P. Cisneros, I. D. García, and R. De Las Heras-Fernández, "Digital technology in Music Education: A review of the literature," *Revista Electronica Complutense de Investigacion en Educacion Musical*. 2019. doi: 10.5209/reciem.60768.

[10] V. F. Gabdulchakov, S. G. Grigoryeva, C. G. Krivonozhkina, and G. S. Zakirova, "Strategic technologies for pedagogic education in Universities," *Educ. Self Dev.*, 2019, doi: 10.26907/esd14.3.10.

[11] M. S. Awad, M. K. Abdullah, R. H. Ibrahim, and R. K. Abdullah, "Nursing students' attitudes toward simulation technology in nursing education," *Int. J. Emerg. Technol. Learn.*, 2019, doi: 10.3991/ijet.v14i14.10571.

[12] K. Alhumaid, "Four Ways Technology Has Negatively Changed Education," *J. Educ. Soc. Res.*, 2019, doi: 10.2478/jesr-2019-0049.

[13] A. Cirrincione, "Multimedia Technologies in Education," *Online Distance Learn.*, vol. 9, pp. 1752–1758, 2011, doi: 10.4018/978-1-59904-935-9.ch139.

[14] O. Shatunova, T. Anisimova, F. Sabirova, and O. Kalimullina, "Steam as an innovative educational technology," *J. Soc. Stud. Educ. Res.*, vol. 10, no. 2, pp. 131–144, 2019.

[15] V. Aleksic and D. Politis, "The Characteristics of Virtual Reality Usage in Educational Systems," *INISTA 2020 - 2020 Int. Conf. Innov. Intell. Syst. Appl. Proc.*, 2020, doi: 10.1109/INISTA49547.2020.9194682.

[16] E. E. Smith, R. Kahlke, and T. Judd, "Not just digital natives: Integrating technologies in professional education contexts," *Australas. J. Educ. Technol.*, vol. 36, no. 3, pp. 1–14, 2020, doi: 10.14742/ajet.5689.

[17] R. Castro, "Blended learning in higher education: Trends and capabilities," *Educ. Inf. Technol.*, vol. 24, no. 4, pp. 2523–2546, 2019, doi: 10.1007/s10639-019-09886-3.

[18] R. Lallez, "Educational technology in universities in developing countries," *Prospects*, vol. 16, no. 2, pp. 177–194, 1986, doi: 10.1007/BF02197906.

CHAPTER 24

AWARENESS OF STRESS MANAGEMENT STRATEGIES AMONG COLLEGE STUDENTS AND ITS EFFECT ON STUDENTS

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ABSTRACT:

In today's fast-paced world stress is found to be very common among every college student due to academic pressure, family issues, personal relationships, mental problems, and psychological stress which lead students to cause mental and physical problems. To overcome this problem, stress management techniques have been introduced into student life to prevent them from stress and guide them on how to manage the stress so that it can improve their academic performance. The main objectives of the study are to determine the various types of stress felt by the students, to examine the effects of stress on college students, and to discover the methods that will help students to reduce their stress levels among college students. The study also focuses on lessening the student's stress so that academic performance can be improved. In this research, the survey has been conducted among 100 college students and has been asked several questions. After collecting the data, it has been found that 71% of college students are aware of stress managing techniques. In the future colleges should organize webinars, workshops, camps, and online promotions to generate awareness of stress management techniques. There has been a done a lot of research on stress management but there is a requirement to discover more new methods to create an awareness of stress management strategies among college students which help them to improve their academic performance.

KEYWORDS:

Academics, College Student, Management Technique, Stress, Stress Management.

1. INTRODUCTION

In today's fast-moving world people are quite busy in their working life such as pursuing education in college and schools, doing professional jobs, and many other works and which leads to providing stress and tension to them. Previously, stress is used in technical education such as physics but currently, it is associated with everyone's life. The reason for people feeling stressed is due to workload on people due to studies, financial issues, and personal and family issues which lead to mental stress, social stress, environmental stress as well as physical stress [1],[2]. In today's world, there is a high competition for studies among young students which leads the generation to face high stress at a young age. The major factors such as the pressure of an exam, tough curriculum, and high competition in getting the highest number of marks in the class lead students to cause physical, mental, and social stress. Due to high stress in life, some students also end up their life by committing suicide due to depression and mental illnesses [3]–[5].

Stress, anxiety, and depression are some of the major common mental health problems which are found in today's generation of college students. The stress factor has a great effect on the

academic performance of students which directly shows the impact on learning quality and learning outcomes of the student. Sometimes students cannot adjust to the new atmosphere when changing the educational institution to pursue education which affects their well-being and studies. This occurs due to new educational institutions having a different method of educating and guiding the students, and maintaining relationships between the faculty and the students [6],[7]. Stress is found to be very common in college students' life because college students require to improve their academic performance to survive in the competition among students and organize themselves for a bright career. It is not a shock that abundant academic stress at the college level is related to what students study and how they acquire it [8],[9].

It has been found that stress has not only a negative impact on the student's life but sometimes it also helps college students in improving their academic achievement when stress is taken only up to a certain level and also motivates students to improve their learning skills and creativity. But when the stress is beyond a certain level it can cause students to lead to various mental and physical problems. The work pressure of academics and high exam pressure motivate students to improve their academic performance and strengthen their learning skills of students. Stress is considered a word that has control over internal feelings. College students feel the stress associated with changes in daily life, novel responsibilities, increased amount of work, and interpersonal connections [10],[11]. High levels of stress can affect work efficiency and result in poor academic performance. The students who are involved in medical courses tend to feel more pressure as compared to the students of other branches [12],[13]. If students fail to handle the stress, then, the feeling of getting stressed becomes high which leads to a high risk of evolving major mental problems. It has been found that the signs of stress are less focused, depression, headache, over-thinking, sleeping, and eating habits, facing problems during the examination, and low confidence.

The main objectives of the study are to determine the various types of stress felt by the students, to examine the effects of stress on college students, and to recognize the factors which lead to cause stress among college-going students in the young generation. This study also aimed to discover the methods that will help students to reduce their stress levels among college students and to enhance their stress management techniques in students. Hence, it has been analyzed that a certain level of stress helps students to improve their academic performance, develop high learning skills, and design a bright future for college students. Stress is not only a portion of life in a college, school, or university but it stays with people for their whole life in every phase of life [14]. Learning how to handle stress, and how to appreciate, encourage and recognize is also an art of life and a significant skill of life, while unmanaged stress results in physical, social, mental disorders, and emotional stress [15],[16].

In this paper,the researcher explains the impact of stress on college students, determines the various stress felt by the students, identifies the factors that cause stress among college students and discovers the methods to manage the stress level among college students. In this paper, the online survey is carried out by making Google forms, conducting door-to-door surveys, and taking opinions from the various college students of different branches.

2. LITERATURE REVIEW

Raja Kumar et al. researched the awareness of stress management among college students. According to the author, the students were very stressed due to academic pressure and competition among college students. The goal of the study was to generate awareness of techniques used by the students to prevent stress. The author conducted an online survey among 100 college students in which 72.4% of students know that eating bananas can reduce stress and 27.6% did not agree that eating bananas can reduce stress. The author concluded

from the study that students were having good knowledge and are aware of the techniques of stress management. But there was a need to create more awareness among the students which helped the students to face various types of stress in the future. The author suggested some techniques such as a positive attitude towards life and doing yoga which helped college students to lessen their stress in life [17].

Kritika Khandelwal et al. discussed the study of stress management strategies adopted by college students. According to the author, college time is the most stressful period in a student's life. The main goal of the study was to calculate the level of stress among college students and to boost the stress managing strategies among college students. The author surveyed 100 college students of different age groups from 18 to 25 years and know about their perspectives on stress and stress management. the author concluded in the research that stress management is essential for every college student to improve their academic performance, prevent them from getting trapped in stress and maintain their stability in life [18].

Swarun Sebastian researched the study on stress management among college students in st. Alphonse college. The research was conducted to help students to understand the stress tackled by college students. The study was conducted to determine the level of stress faced by college students, what are the various types of stress which are caused to college students, and to determine its effects on students. The author collected the data by surveying 100 students and found that the majority of the students feel stressed. It was concluded that there was a wide variety of stresses such as academic stress, family issues, financial problems, future insecurity, and love relationships also included in the list [19].

R.hemamalini et al. discussed the study on stress management and its impact on students. According to the author, stress is a type of condition where it comprises a lot of work and overload which lessen the focus, and concentration of college students. The main goal of the study was to determine the effect of stress on the academic performance of students. The author conducted a survey and distributed a questionnaire among the students doing post-graduation to analyze the data. The author found that 40% of students experience stress due to examination fear, not understanding the subject, and due to academic performance. The author concluded that students of any age or gender faced the same impact on studies due to stress and education on stress management must be provided which comprises doing yoga, relaxation, positive thinking, and so on was helpful for students to manage the stress [20].

Research question:

1. *How does stress affect the academic performance of college students?*
2. *What are the factors that cause stress among college students?*
3. *What are the methods that teach students to manage stress?*

3. METHODOLOGY

3.1 Research design:

The outlay or design research of the paper deals with the problems that occurred due to the impact of stress on college students, which further discusses the factors responsible for causing stress among college students and measures to manage the stress level which directly impacts the academic performance of college students.

3.2 Sample:

For sampling the door-to-door survey, distributing online Google forms is conducted among 100 respondents. The respondents are asked various questions to identify stress management among the various college students and what are the stress management techniques to reduce stress.

3.3 Instruments:

The object of the questionnaire is to obtain the answers from various respondents. The questionnaires contain objects to determine the required factors so that research could be carried out. In general, there are various questions mentioned in the questionnaire. There are some of the questions which are asked during the door-to-door survey and via distributing Google forms in the colleges:

1) Are college students aware of stress management strategies?
2) Do college students feel stress in life?
3) What are the causes of stress in the life of students?
4) What are the effects of stress on the body of college students?
5) What activity do students like to perform during the stress?
6) What are the effects of stress on the mind of college students?
7) Are college students aware of strategies to prevent stress?
8) What activities do students do to reduce stress?
9) Is stress important for college-going students?
10) What are the stress management techniques used by college students?

3.4 Data collection:

A data collection questionnaire has been established. The questionnaire is distributed among the various college students doing different kinds of courses. The survey was conducted among 100 respondents and several questions are asked respondents regarding stress management strategies. There are 45 females and 55 males included in the survey conducted among 100 respondents.

Figure 1: Illustrates About the Awareness of Stress among Various Respondents

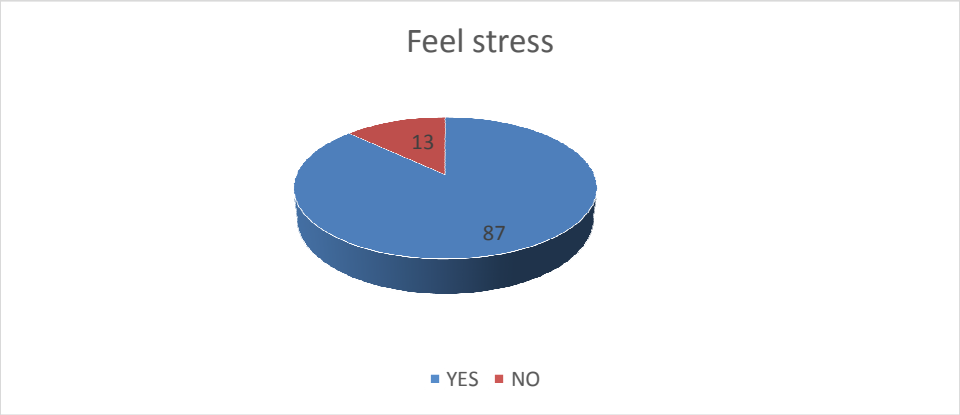

Figure 2: Represents Feeling of Stress among Respondents

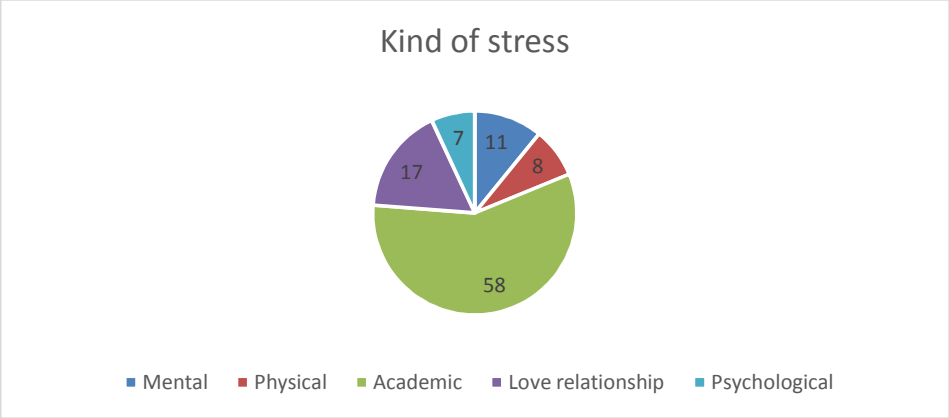

Figure 3: represents about Kinds of Stress from Various Respondents

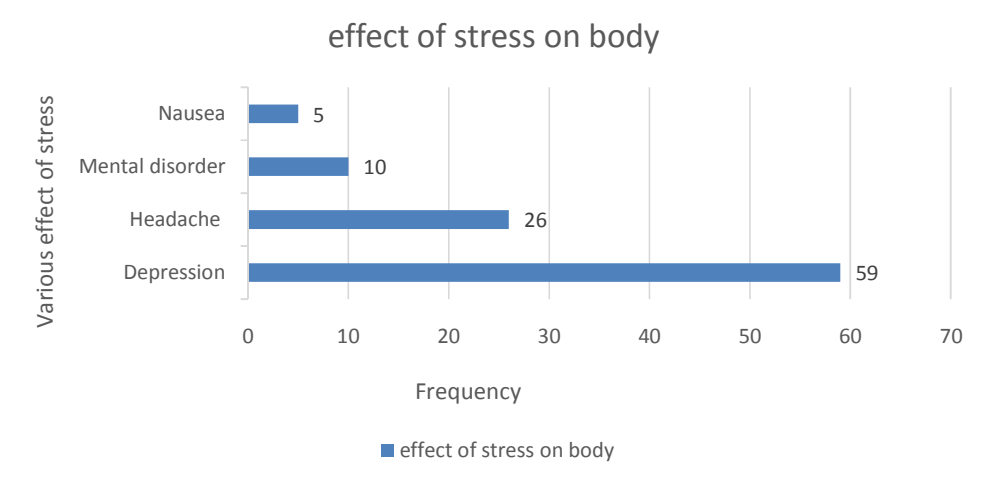

Figure 4: Shows the Effect of Stress on Body

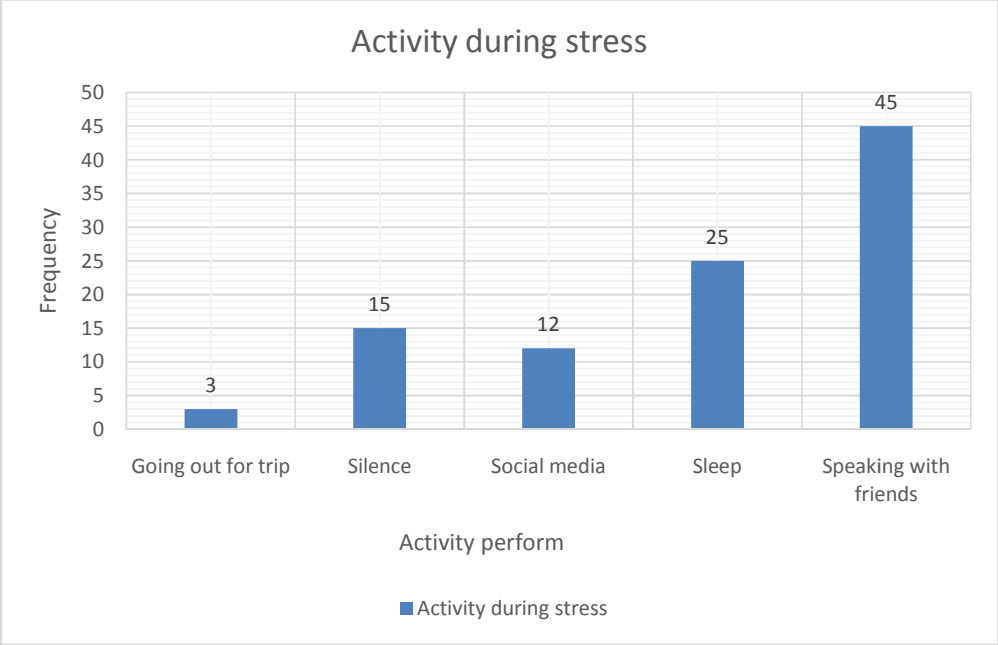

Figure 5: Illustrates the Activities done During the Stress

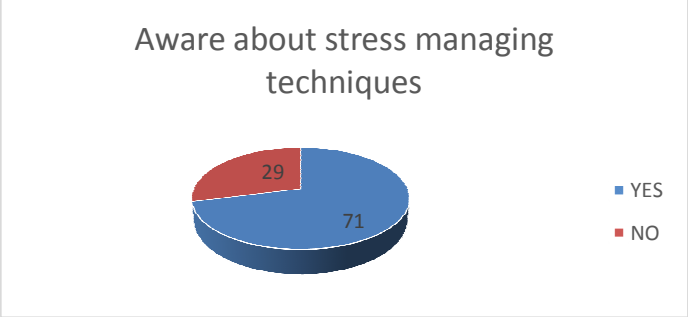

Figure 6: shows Awareness of the Stress Management Technique

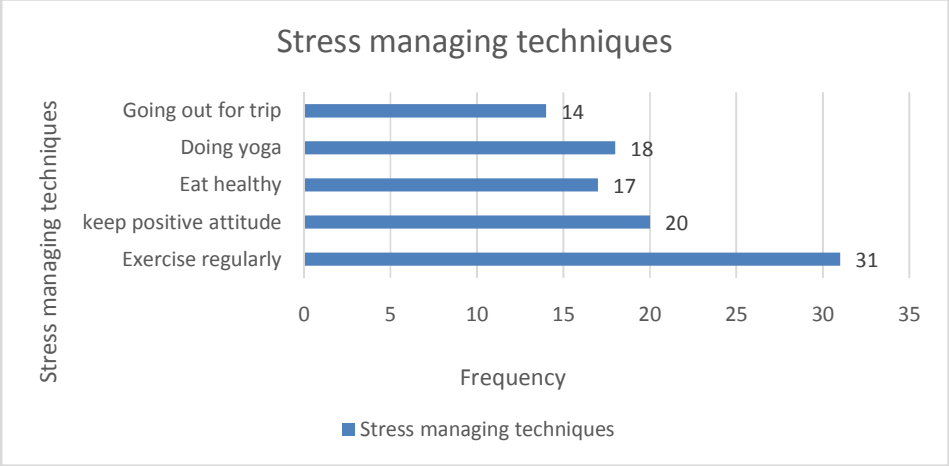

Figure 7: Illustrates About the Stress Managing Techniques to Reduce Stress

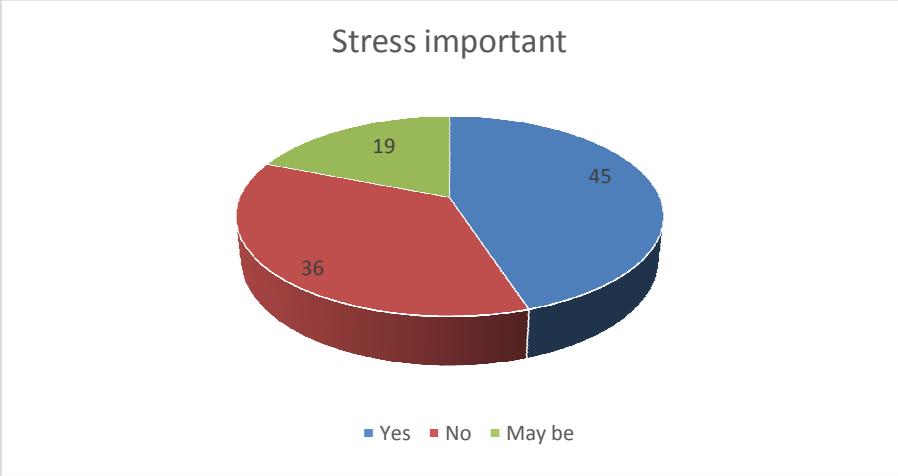

Figure 8: Shows the number of respondents responding to stress required in college life.

3.5 Data analysis:

After collecting all the data by surveying 100 respondents of college-going students in which 45 females and 55 males are included to survey the various respondents. The survey was conducted among college-going students who are pursuing different kinds of courses and are asked several questions. It has been analyzed that 76% of people are aware of stress and 24% of people are not aware of stress as shown in Figure 1, 87% of people feel stress and 13% of people do not feel stress as shown in Figure 2. 58% people suffer stress due to academics, 17% people suffer stress due to love relationships, 11% people suffer stress due to mental stress, 8% people suffer stress due to physical stress, and 7% people suffer stress due to psychological stress as shown in Figure 3. 59% people suffer from depression due to stress, 26% people suffer from headache, 10% people suffer from a mental disorder, and 5% people suffer from Nausea as shown in Figure 4. It also has been observed that 45% of people choose to speak with friends during stress, 25% of people choose to sleep, 15% people choose to stay silent, and 12% and 3% choose to use social media and go out for a trip as shown in Figure 5. 71% of people know about stress managing techniques while 29% of people do not know about stress management techniques as shown in Figure 6. The stress-managing technique of exercising regularly is opted by 31% of people to reduce stress, 20% of people practice keeping a positive attitude, 18 % of people perform yoga, 14% and 17% of people use going out for a trip and eat healthy diet technique to prevent from stress as shown in Figure 7. 45% people think that stress is important, 36% people think that stress is not important, and 19% people are not sure about it as shown in Figure 8.

4. RESULTS AND DISCUSSION

The management of stress is the key factor that helps college students prevent stress. The stress caused to students is mainly due to academic pressure on students as 58% of students suffer from academic stress during their college days. The main objectives of the study are to determine the various types of stress felt by the students, to examine the effects of stress on college students, and to recognize the factors which lead to cause stress among college-going students in the young generation. According to a survey conducted 59% of students suffered from depression due to the effect of stress on their body and 26% of people suffer from a headache due to the effect of stress. It has been finding out from the study that to overcome stress, the college students must follow the stress managing techniques in their daily routine

in which 31% of students exercise regularly, and 20% of students keep a positive attitude towards their life which are the few stress-managing techniques which helps the students to overcome them from stress. The result has been found that 87% of students feel stress in their college life and only 71% of students are aware of the stress managing techniques and 29% are not aware of it.

Students do different kinds of activities while under stress such as 45% of students like to speak with friends and 25% of students chose to sleep while they are in a condition of stress. It has been found that certain stress is essential for college students to enhance their academic performance, improve their careers, and also motivate students to improve their performance and strengthen their learning skills of students. According to a study, only 45% of students think that stress is important, 36% of students do not agree that stress is required in college life and 19% of students' response was neutral. The results also find out in a way that 31% of students use the technique of doing exercise regularly to overcome stress, 20% of students tend to keep a positive attitude towards life, 18% of students do yoga, 17% of students eat a healthy diet, and 4% students use the technique of going outside for a trip to improve their academic performance, develop their learning skills, and increase their focus and concentration on their academics as shown in Figure 9.

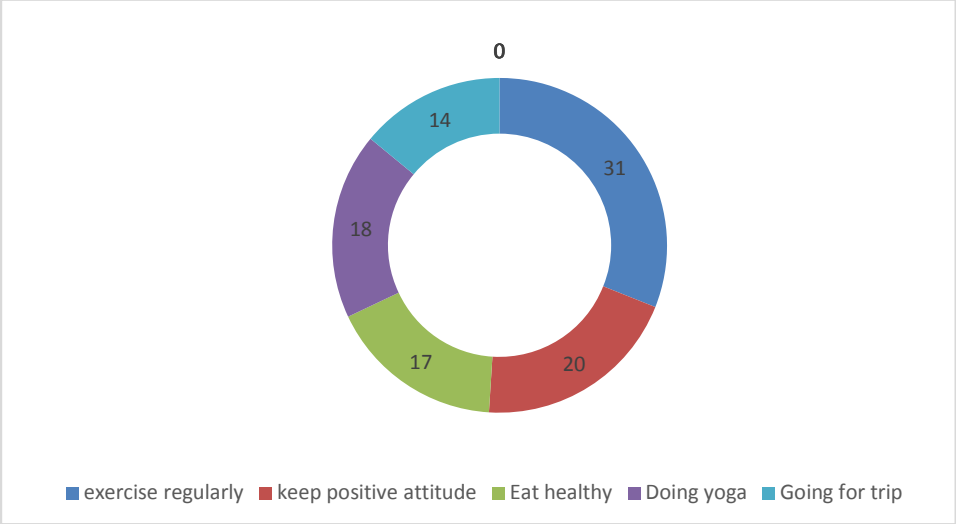

Figure 9: Represents the Most Effective Stress Managing Techniques to Prevent Stress from College Students

5. CONCLUSION

In this era of globalization, there is a high level of competition in academics among the young students which leads the generation to face high stress at a young age. The main objectives of the study are to determine the various types of stress felt by the students, to examine the effects of stress on college students, and to discover the methods that will help students to reduce their stress levels among college students and to enhance the stress management techniques in students. According to a study it has been found that most students feel stressed and the reason for students feeling stressed is the workload on people due to studies, financial issues, and personal and family issues which lead to mental stress, social stress, environmental stress as well as physical stress. Most of the students that are 71% are aware of the stress management techniques. Stress management education is provided to students by organizing Systematic workshops, seminars, and awareness camps to

create an awareness of stress management techniques that helps students to manage the stress in college life.

It has been concluded that talking with friends and keeping a positive attitude toward life are found to be the most effective techniques to prevent college students from stress. The study also concluded that certain stress level is essential for college students to show some positive impacts on students' academic performance and development of their learning skills. If the stress is not well managed then it can cause students to lead to having various mental, and psychological effects on the body. Depression and headache are found to be the most found effects on the body due to stress. Continuous awareness of stress matter was found helpful in preventing stress-associated disease. In the future, the sample size must be bigger, surveys conducted in colleges in different cities, and more statistical analyses should be performed to know more about stress management. College students' academic performance and learning quality skills should be encouraged to make their careers bright. The results show that there is still more need for research to create awareness of stress management techniques among the students by conducting awareness camps, workshops, and stress management education should be provided in the colleges to prevent stress among college students.

REFERENCES

[1] A. M. Alzahem, H. T. Van der Molen, A. H. Alaujan, and B. J. De Boer, "Stress management in dental students: A systematic review," *Advances in Medical Education and Practice*. 2014. doi: 10.2147/AMEP.S46211.

[2] K. M. Lepping, C. P. Bailey, M. N. Mavredes, J. M. Faro, and M. A. Napolitano, "Physical Activity, Stress, and Physically Active Stress Management Behaviors Among University Students With Overweight/Obesity," *Am. J. Lifestyle Med.*, 2021, doi: 10.1177/15598276211020688.

[3] B. M. Morgan, "Stress Management for College Students: An Experiential Multi-Modal Approach," *J. Creat. Ment. Heal.*, 2017, doi: 10.1080/15401383.2016.1245642.

[4] S. Sharma, "A study of stress management on college student and its effect," *J. Crit. Rev.*, 2020, doi: 10.31838/jcr.07.16.209.

[5] D. Rizzolo, G. P. Zipp, D. Stiskal, and S. Simpkins, "Stress Management Strategies For Students: The Immediate Effects Of Yoga, Humor, And Reading On Stress," *J. Coll. Teach. Learn.*, 2011, doi: 10.19030/tlc.v6i8.1117.

[6] K. Kassymova, N. Kosherbayeva, S. Sangilbayev, and H. Schachl, "Stress management techniques for students," 2018. doi: 10.2991/ictppfms-18.2018.10.

[7] C. Benjet, "Stress management interventions for college students in the context of the COVID-19 pandemic.," *Clin. Psychol. Sci. Pract.*, 2020, doi: 10.1111/cpsp.12353.

[8] "Stress management strategies among medical students," *Santosh Univ. J. Heal. Sci.*, 2020, doi: 10.18231/2455-1732.2018.0009.

[9] M. Hori and A. Shimazu, "A stress management program for university students," *Shinrigaku Kenkyu*, 2007, doi: 10.4992/jjpsy.78.284.

[10] P. Nivethitha and S. Rita, "A Study on Stress Management Among College Students," *Int. J. Eng. Sci. Res. Technol.*, 2016.

[11] W. Ma, "An experimental study on stress management of college students by physical exercise," *Basic Clin. Pharmacol. Toxicol.*, 2019.

[12] G. N. Hailu, "Practice of stress management behaviors and associated factors among undergraduate students of Mekelle University, Ethiopia: A cross-sectional study," *BMC Psychiatry*, 2020, doi: 10.1186/s12888-020-02574-4.

[13] N. Salmon, "Massage and Stress Management for College Students," *World J. Yoga, Phys. Ther. Rehabil.*, 2019, doi: 10.33552/wjypr.2019.01.000514.

[14] S. Arif, K. Moran, A. Quinones-Boex, and S. El-Ibiary, "Student Stress Management and Wellness Programs among Colleges of Pharmacy," *Inov. Pharm.*, 2021, doi: 10.24926/iip.v12i2.3478.

[15] J. Choi, "Impact of stress levels on eating behaviors among college students," *Nutrients*, 2020, doi: 10.3390/nu12051241.

[16] S. L. Bistricky *et al.*, "Understanding and Promoting Stress Management Practices Among College Students Through an Integrated Health Behavior Model," *Am. J. Heal. Educ.*, 2018, doi: 10.1080/19325037.2017.1377651.

[17] R. Kumar, "Awareness on Stress Management Techniques Among College Students - A Survey," *Int. J. Pharm. Res.*, vol. 12, no. 03, 2020, doi: 10.31838/ijpr/2020.12.03.463.

[18] K. Khandelwal1 and B. Chahar2, "A STUDY OF STRESS MANAGEMENT STRATEGIES ADOPTED BY COLLEGE STUDENTS IN JAIPUR CITY," p. 8, 2020.

[19] S. Sebastian, "A study on the stress management among college students with special reference to St . Alphonsa College , Mannarkkad," *Int. J. Res. Anal. Rev.*, vol. 5, no. 3, pp. 315–320, 2018.

[20] R. Hemamalini, V. Ashok, and V. Sasikala, "A Study on Stress Management and its Impact among Students," *Int. J. Acad. Res. Econ. Manag. Sci.*, vol. 7, no. 3, pp. 101–110, 2018, doi: 10.6007/ijarems/v7-i3/4439.