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**A Peer Reviewed Research Journal
in Education**

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St. Joseph College of Teacher Education For Women

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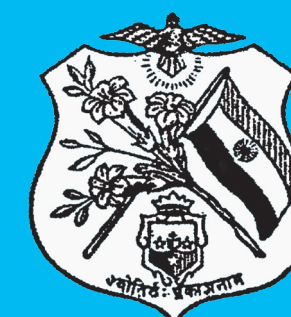
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Editorial

Edufocus, Peer reviewed journal in Education contains a collection of nine research articles. First research article titled Awareness on Sustainable Development Goal 6 among Post Graduate Students in Education study aimed to assess postgraduate students' knowledge of Sustainable Development Goal 6. The investigation was conducted using a survey methodology. The study found that although everyone is aware of SDG 6, they all believe that current efforts to fulfill it should be improved.

The second paper, Social Media Addiction among Adolescence was a theoretical paper. This paper throws light into the fact that about a sector of adolescents are social media addicts. Social media podiums are a popular communication tool, the insensible and unnecessary use of teenagers can negatively affect their lives in many ways.

The third paper titled The Relevance of Life Skill Education in Achieving Sustainable Development Goals 4 and 5 in Kerala, India, was a theme paper that analyze the relevance of LSE in achieving SDG 4 and 5 in Kerala. The author derives the conclusion that policymakers and educators should prioritise LSE and ensure that it is effectively integrated into the educational system.

The fourth paper titled Awareness of Sustainable Development Goal 11 among Student Teachers at Secondary Level, was a survey study that aims to investigate the level of awareness of Sustainable Development Goal (SDG) 11, which focuses on sustainable cities and communities, among student teachers at the secondary level. The findings of the study will contribute to a better understanding of the level of awareness of SDG 11 among student teachers and inform the development of educational strategies to promote sustainable development in secondary schools.

The fifth paper titled A Survey on the Sustainable Development Goal 5 among Student Teachers at Secondary Level was a survey on the goal targets of SDG 5 among student teachers at the secondary level. The findings of the investigation showed the secondary-level student teachers' aspiration to build a gender-equal world for a sustainable future.

The sixth paper titled Academic Stress among Student Teachers at secondary level: A Comparison based on Stream of study and Gender aims to investigate the academic stress of student teachers at the secondary level based on stream of study and gender. The results of the study revealed that there is no significant difference between the mean score of academic stress of student teachers based on Stream of study and there is a significant difference between the mean score of academic stress of student teachers at secondary level based on gender.

The seventh paper titled Developing a Multimedia Package for Enhancing Awareness on Rainwater Management among Secondary School Students, was an experimental study. The finding of the study reveals that Multimedia Package is very effective in enhancing Awareness on Rainwater Management among secondary school students.

The eighth paper Role of Education in Promoting the mental health of Students in the post-Covid Period was a theme paper which highlights the concept of social skills that suits the constructive needs of the learner in the post-Covid –new normal educational scenario and also discusses how to foster social skills through various school subjects in futuristic normal education.

The Ninth paper Efficacy of Individualized Instruction for Enhancing the Teaching Aptitude of Student Teachers at the Primary Level, aimed at studying the Teaching Aptitude of student teachers at the primary level. The results of the study revealed that Teaching aptitude of Student Teachers at the Primary level in Individualized Instruction differs significantly on qualification. Post Graduation holders have more teaching Aptitude for individualized instruction compared to another Subsample.

Dr. Smitha Jose

Editor

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Editorial Policy

The Edufocus is a peer reviewed national , research journal in Education published by St.Joseph College of Teacher Education for Women, Ernakulam, Kerala. Its objective is to promote scholarship and discourse about education and interdisciplinary areas of research. Edufocus explore empirical, philosophical, theoretical, practical, and applied aspects of Education. Edufocus offers a forum for discussion and presentation of ideas, theory, and research. More than half of the papers will be from research and rest include articles, expression, perception, case studies and reviews. The journal is published bi-annual in the month of June and December every year.

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Each paper is reviewed by a Peer Review Panel comprising of senior academicians. The Peer Review Panel will judge and evaluate the quality and appropriateness of each manuscript for publication. Acceptance of a paper for publication is contingent upon the suggestions and recommendations based on peer reviewers. Based on the recommendations of Peer Review Panel, the Chief Editor will decide to publish the manuscript as submitted, publish the manuscript with suggested revisions. In all cases the author will be notified of the decision, and in the event the manuscript is rejected, no reasons for that decision will be forwarded. The primary responsibility for publishing Edufocus rests with the Chief Editor, with the support of the Peer Review Panel and Editorial Board. The publishing of manuscripts by Edufocus will be on such terms and policies as may be decided by the Chief Editor in consultation with the Editorial Board. The Chief Editor retains final authority over the content of the Edufocus.

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Awareness on Sustainable Development Goal 6 among Post Graduate Students in Education

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ABSTRACT

This study aimed to assess postgraduate students' knowledge of Sustainable Development Goal 6. The investigation was conducted using a survey methodology. In order to do this, the researchers created a questionnaire on SDG 6 and distributed it to 23 postgraduate education students. The investigators asked inquiries about ways to enhance the current SDG 6 programmes. A provision was made to identify the main obstacles to attaining SDG 6 in 2030. The study found that although everyone is aware of SDG 6, they all believe that current efforts to fulfil it should be improved

Keyword: *sustainable development goal*

1. INTRODUCTION

The need to achieve SDG Goal 6 by the year 2030 was acknowledged by every country in the globe. To make the world a better place, everyone should be cautious when pursuing sustainable goals. The objectives of sustainable development include eradicating all risks to humankind and fostering the required values. (Everything about the Sustainable Development Goal 6, n.d.) Assuring universal access to water and sanitary facilities under sustainable management is the sixth objective of sustainable development. Eight specified goals must be completed by 2030.

1. Access to clean, cheap drinking water for everyone
2. Ensure fair sanitation and hygiene for everyone
3. Using wastewater recycling to raise water quality
4. Lessen the number of individuals who experience water scarcity

5. Use water resource management strategies at all scales.

6. Preserve the environment and water resources

7. Advance global comprehension of environmental consciousness

8. Work with local organisations to achieve SDGs 6

A creative three-year partnership between One Drop and METRO AG and partnering METRO suppliers was launched in 2019 to address the problem of safe water access in India. They chose India since there is a water shortage there. Campaigning will take place across Asia for two weeks as part of this initiative. Products that increase access to clean water and sanitary facilities are provided by this effort. Bihar was one of the main regions they chose. (Global Waste Cleaning Network, 2019) This initiative covered approximately 22 countries in 2019 and raised more than US\$330,000.

A bulletin on SDG 6 was released by the US Department of Economic and Social Affairs Sustainable Development. This analysis

demonstrated that a four-fold increase in the rate of action is required to meet the need for sanitation and hygiene by the year 2030. According to this report, 1.6 billion people lack access to clean drinking water, 2.8 billion lack access to sanitation, and 1.9 billion lack access to facilities for safe hand hygiene.

One Drop and METRO AG joined forces with participating METRO suppliers in an innovative three-year partnership designed to tackle the issue of safe water access in India. They selected India because our country is affected by water scarcity. this programme involves two weeks of campaigning throughout Asia. This initiative supplies products which improve access to safe water and sanitation. the major area they selected was Bihar. In 2019 this campaign covered around 22 countries (*Global Waste Cleaning Network*, 2019) and raised more than US\$330,000.

Department of Economic and Social Affairs Sustainable Development, United States published a newsletter on SDG 6. This report showed that for satisfying the need for sanitation and hygiene target by 2030 requires a four times increase in the pace of actions .this report also suggests that 1.6 billion people lack drinking water,2.8 billion people lack sanitation and 1.9 billion people lack safety hand hygiene facilities.

2. Objectives of the study

- (1) To study the awareness of postgraduate students on SDG 6
- (2) To find out the ways for recovering threats for achieving SDG 6
- (3) To collect the suggestions on the existing programmes for achieving SDG 6

3. METHODOLOGY OF THE STUDY

3.1 Method adopted

Survey Method was adopted for the study

3.2 Sample

Twenty-three postgraduate students in education were selected as the Sample for the study

3.3 Tool

A questionnaire on Awareness of SDG 6 was prepared and refined by the investigators

4. Procedure adopted

Phase I-Preparation

Investigators analysed the content and discussed the topic thoroughly. After discussions, they prepared a questionnaire based on the sub-concepts of the topic “Ensure Availability and Sustainable Management of Water and Sanitation For All.”

Phase II-Refining

As part of refining the questionnaire, the investigators produced the questionnaire for experts in the field of Environmental Education. Incorporating the views of experts, investigators finalise the questionnaire by including ten questions. Out of ten questions, one question was open-ended

Phase III- Administration

The questionnaire was administered to a sample of twenty-three postgraduate students in Education.

Phase IV

The data were analysed using descriptive statistics

5. ANALYSIS OF THE DATA

The responses regarding the possibility to ensure a clean and stable water supply and effective water sanitation for all people by the year 2030 are given in Table 1

Table 1

Possibility of ensuring a steady supply of clean water and efficient water sanitation by the year 2030

Sl.No	Aspect	Response		
		GE	SE	NA
	It is possible to ensure a clean and stable water supply and effective water sanitation for all people by the year 2030	4.4	73.9	21.7

It is evident from Table 1 that 4.4% of students responded that it is possible to ensure a clean and stable water supply and effective water sanitation for all people by the year 2030 to a great extent .73.9% opinioned that it is possible only to some extent. 21.7 % reacted that it is not at all possible to ensure a clean and stable water supply and effective water sanitation for all people by the year 2030.

The responses regarding the population lacking sanitation services such as latrines or toilets are given in Table 2

Table 2

lists of the replies on the population's lack of access to latrines or toilets

Sl.No	Aspect	Response in %			
		1 Billion	2 Billion	3 Billion	Not Aware of it
1	People lacking sanitation services such as latrines or toilets	17.4	26.1	13	43.5

It is found in Table 2 that 43.5% of PG students are not aware of the population lacking sanitation services such as latrines and toilets .17.4% opinioned that it is one billion, 26.1 % reported that two billion and 13% reported that three billion people lacking sanitation services such as latrines and toilets.

The responses regarding the efficiency of existing wastewater management systems to meet the needs of drinking water in future are given in Table 3

Table 3

Existing wastewater management system to meet the needs of drinking water in future

Sl.No	Aspect	Response in %		
		GE	SE	NA
1	Existing wastewater management systems can satisfy the need for drinking water in future	43.5	52.2	4.3

It is evident from Table 3 that only 52.2% responded that existing wastewater management systems can meet the needs of drinking water in future to a great extent .43.5%think that existing

wastewater management systems can meet the needs of drinking water in future only to some extent. 4.3% reacted that it is not at all possible to meet the needs of drinking water in future by the existing wastewater management system

The responses regarding the ways for meeting the goals of SDG 6 are given in Table 4

Table 4

The responses regarding the ways for meeting the goals of SDG 6

Sl.No	Suggested ways for meeting the goals of SDG 6	Response in %
1	Protecting ecosystems throughout the world	60.86
2	Eliminating sources of water pollution can save water scarcity in our country	52.17
3	Increasing international cooperation to bring services throughout the world can minimize water shortages in future	69.5
4	Installation of Smart Meters in Places Where Water Scarcity is Experienced is an Appropriate Method for Sustainable Management of Water	43.47
5	Assuring the quality functioning of public health services	86.95
6	Awareness programmes on the effective use of water sources	78.26
7	Incorporating Governmental and Non- Governmental agencies for arranging sanitation facilities	82.60
8	People-centred programmes to cater for the specific needs of Diverse Population groups	65.21
9	Facilities, Goods and Services must be Scientifically and Medically approved	39.13

It is evident from Table 4 that assuring the quality functioning of public health services(86.95%) is the best way to meet the goals of SDG 6. It is followed by: Incorporating Governmental and Non-Governmental agencies for arranging sanitation facilities(82.60%), Awareness programmes on the effective use of water sources(78.26%), Increasing international cooperation to bring services throughout the world can minimize water shortage in future (69.5%), People-centred programmes to cater the specific needs of Diverse Population groups(65.21%), Protecting ecosystems throughout the world(60.86%), Eliminating sources of water pollution can save water scarcity in our country (52.17%), Installation of Smart Meters in Places Where Water Scarcity is Experienced is an Appropriate Method for Sustainable Management of Water(43.47%) and Facilities, Goods and Services must be Scientifically and Medically approved(39.13%)

The responses regarding the major threats to meeting the goals of SDG 6 are given in Table 5

Table 5

The responses regarding the major threats to meeting the goals of SDG 6

Sl.No	The major threats to meeting the goals of SDG 6	Response in %
1	Improper waste management system	34.8
2	Lack of monitoring system for water management	47.8
3	Environmental pollution	65.2
4	Violation of laws on environmental matters	39.1
5	Unavailability of sanitation facilities in villages	30.4
6	Destroying natural water sources without proper maintenance	43.5

It is found that environmental pollution (65.2%) is the major threat to meeting the goals of SDG 6. It is followed by: Lack of monitoring system for water management(47.8%), Destroying natural water sources without proper maintenance(43.5%), Violation of laws on environmental matters(39.1%),

Improper waste management system(34.8%) and Unavailability of sanitation facilities in villages(30.4%)

6. FINDINGS AND DISCUSSIONS

1) All people will be aware of this aim of the world

2) Environment should be protected in a better way

3) Rules and regulations should be there to avoid destroy of rivers and other water sources

4) Government should ensure proper sanitation facilities

5) Integrated water management system should be implemented all over the country

6) By expanding international cooperation in this regard India can meet goal 6 easily

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SOCIAL MEDIA ADDICTION AMONG ADOLESCENCE

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Abstract

Each and every individual passes through various stages of life. Adolescence is one of the vital stages in which one must pass through. The way all individual pass through it with the help of persons around him/her determines how better the person's youth and mature ages will look like. Adolescence is a dynamic stage of growth and development, and it marks the period of change from infantile to adulthood. It is characterized by rapid physiological changes and psychosocial maturation. It is also the stage when young people extend their relationships beyond parents and family and they are strongly influenced by their peers and the outside world and this adolescent period is very important in one's life. Early life experiences form the basis for personality development and it experiences during the adolescent years and contribute meaning fully to the unique features and development of the new grownups. With the cumulative use of social media, the addictive habit of the innovative technology also grows. Earlier studies prove that social media usage is connected with harmful consequences such as reduced productivity, unhealthy social relationships, and condensed life-fulfillment. However, all-inclusive hypothetical thoughtful of how social media habit progress is still missing, which hinders practical research that aims at designing educational and other involvement plans to avoid social media compulsion.

Key terms–Social media addiction, adolescence.

Definition of key Terms

Adolescence is a transitional stage of physical and psychological development that generally occurs during the period from puberty to adulthood.

Social media addiction is a behavioural addiction that is driven by an uncontrollable urge to log on the media and giving so much time and effort to concentrate these areas.

Introduction

“Adolescence ([Latin](#) *adolescere* 'to mature') is a life period in which the body undergoes different changes and it may lead to reproductive maturity.”

Social media is an array of internet-based tools and platforms that increase and enhance the experience of sharing information. Majority of chil-

dren and adolescences use the Internet, cell phones, and other mobile devices irrespective of their ages. Since last decades, the addiction to social media has been more in our country. Though majority of the people's use of social media is not challenging but some users get addicted to the social networking sites. It is a sole stage of human development and media can negatively affect adolescence, distracting them, disrupting their sleep

(Koc and Gulyagci, 2013, Wolniczak et al., 2013), rumour spreading, impractical views of other people's lives and peer pressure, cyberbullying, social anxiety, low self-esteem, personal dissatisfaction, anxiety, depression (Elphinstone and Noller, 2011), irritability, isolation, distancing oneself from the real world and from family relationships (Fox and Moreland 2015, Müller 2016), loss of control, hyperactivity, and even lack of affection.

Adolescents are at the highest risk of falling into addiction. From expert's view, there are mainly three reasons, the tendency to be impulsive, social influence, and the need to repeat their group identity. In everyday life, it is difficult to control the social media. Though it is not known as a clinical disorder, it is a behavioural one. But many professionals and researchers agree that social media can be addictive for some people. Students who spend additional time on sites are likely to prove poor academic performance because they spend more time to chatting online and making friends on social media sites as an alternative to read books. Nigeria leads the rankings for countries most dependent to the social media.

Review of related studies

The World Health Organization (WHO) definition officially designates an adolescent as someone between the ages of 10 and 19. (Definition of Adolescence by WHO - Google Search, n.d.)

The United Nations Population Fund (UNFPA) also defines adolescents as being between the ages of 10 and 19, which is similar to the definition of WHO.

The World Bank and The International Labor Organization (ILO) refers to adolescents as "youth" who are between the ages of 15 and 24. Different countries and regions often define adolescence differently, according to their cultural beliefs and practices.

Daria J. Kuss (2017) suggests that social media have gained increasing popularity in the last decade, and also noticed that individuals connecting with others who share similar interests.

Igor Pantic (2014) During the past decade, social media had caused deep changes in the way the people communicate and interact. And the changes may affect the normal features of behaviour and cause some psychiatric disorders. Several studies showed that continued usage of different social networking sites can lead to different diseases

Yadav J. Set al (2011) the study recommended that the social media could negatively affect the results discovered that many students used social media especially Facebook and that they spent increasing amount of quality time on these networks. Findings of this study recommended that social media could negatively affect on the student's social behaviour, academic progress etc.

Gwenn Schurigin O'Keeffe, et al (2011). It was claimed that the parents should be aware about the social media sites and also monitor them.

Koc and Gulyagci (2013) found that social media addictions like Facebook was related to factors such as usage of time, social motivations, depression, insomnia, anxiety etc. However, they did not find any significant relations regarding demographic factors.

Rosen et al., (2013), it was found that regular access to Facebook is connected with clinical appearances of psychiatric disorders.

(Siddiqui S & Singh T., 2016), social media has been an important part of the persons life, i.e. from education, shopping, business tools etc plays an important role in the transformation of the people's life.

According to, (Tokunaga, 2011), the unnecessary use of social media can interrupt interpersonal relationships. (Simseketal., 2019)

Features of social media

- Ability to explore new identities: social media allows people to “try on” new identities and share them with the world.
- Desire to share photos and videos: Sharing photos and videos on different sites like Instagram, TikTok etc.
- “Fear of missing out,” or FOMO: People fear that other people are having positive experiences that they are not a part of it.
- “Nomophobia”: the condition in which the people have a fear of being detached from phone connectivity.

Importance of adolescent health

Psychologists, psychiatrists and other experts' opinion that the addiction may turn anxiety and depression into nausea, headaches, loneliness, self-harm, suicidal thoughts, muscle tension tremors etc. Adolescents may spend as much as 9 hours of each day online as reported by the 2015 Commonsense survey. Many of these individuals are themselves concerned that they When we spend too much

time for browsing social networks, it is found that social media could affect the mental health of its users. A 2019 study Trusted Source tangled social media use to disturbed and delayed sleep. Sleep is essential for well-being, and evidence shows that sleeping problems pay to adverse mental health effects, suchas depression and memory loss. One of the problems of social media stages is that the people got a chance to spread gossips and rumours and it may cause problems in day to day life.

SYMPTOMS OF DEPENDENCY ON SOCIAL MEDIA

- When the internet is slow down,the user feeling unsettled.
- Checking the social media early morning and night.
- Using social media while walking or driving.
- Feeling bad when not receiving likes, retweets or views.
- For communication, preference will be given to network groups.
- Touch the necessity to share normal things all the time at any occasion.
- Wherever we go, we always check the social media.
- Dopamine is a chemical that act as the development of addiction. When we check the phone for notifications or new updates, it triggers anticipation. And if we get positive reactions suchas views or likes, the dopamine will be released in the brain. As a result, it's hard to put down the phone.

When we apply extratime on social media, we will get less time for face-to-face interactions. In some cases, social media may have a constructive effect on mental health and the evidence suggests that social media can help people connect online with peers who understand them. Today, the Internet has become one of the most powerful means of socializing (Douglas et al., 2008). Through different information technologies, the interpersonal relationships are formed highly (Bargh & McKenna, 2004). It is observed that the people use internet mostly for social purposes (Kwon & Wen, 2010). Social networks come first with 80.9% for the internet use purposes (Turkey Statistics Institute [TurkStat], 2018). Today, the social networks, which reached a great usage, Ünal, 2013).

Types of Internet Addiction

- Cybersex Addiction- also known as internet sex addiction, is defined as sexual activity on the internet or online that causes addiction, has a negative impact, and includes physical, mental, social, or financial problems.
- Net Compulsions – It includes **compulsive online gaming, gambling, stock trading, or compulsive use of online auction sites such as eBay**, often resulting in financial and job-related problems.
- Cyber (Online) Relationship Addiction – it contains texting, chatting, messaging etc.
- Compulsive Information Seeking -This involves an uncontrollable urge to gather and organize data. In some cases, information seeking is a manifestation of pre-existing, obsessive-compulsive

tendencies. It can also reduce work productivity and potentially lead to job termination.

- Computer Or Gaming Addiction - Video game addiction, also called internet gaming disorder, is a condition characterized by severely reduced control over gaming habits, resulting in negative consequences in many aspects of your life, including self-care, relationships, school and work.

Children born since the late 1990s have grown up in a world that has been reliant on technology as integral part of their lives, making it impossible to imagine life without being connected. It is observed that the use of net become widespread among the adolescents with the increasing opportunities for access to internet, and with the rapid changes in the technological devices (computer, tablet, smartphones, etc.). For example, according to a report issued by the United Nations International Children Emergency Fund (2017), the highest rate of internet access was conducted by the youth in the 15-24 age group.

According to a study conducted in 2015, it was determined that a 15-year-old adolescent living in the OECD countries spend an average of 29 hours weekly in internet (Organisation for Economic Co-operation and Development [OECD], 2018). Considering these data, it can be mentioned that social media usage has an important place in the lives of the youth in the adolescence period.

Ways to prevent addiction in social media users

1. Set time limits for social media use:

Try to limit yourself to 30 minutes per day or less. We can also set time limits at certain times of day, or on certain days of the week or use social media for 30 minutes in the evening, after work, or at school. There are different ways to set time limits. One way is to use a timer. Set the timer we want to spend on social media, and when it goes off, stop using social media. Another way is to download an app that will track our usage and limit the access.

2. Avoid using social media when we are feeling down:

If we are feeling sad, angry, or anxious, avoid using social media and try to do something else that will make feel better, such as talking to friends, going for a walk, or listening music.

3. Be aware of other social media activities:

If we know the triggers, we should avoid them. When we are bored, try to read.

4. Don't compare your self to others:

When people post the photos and videos, sometimes they edit or filter it. So don't compare the life in which we see on the social media.

5. Spend Time with Family and Friends:

Try to spend time with family members. Plan and arrange different activities.

Other types of behavioural addictions include gambling, shopping,

and sex. It also shares some similarities to drug or alcohol use disorders. Both social media and substances can be addictive. But the consequences people experience may be different. For example, people with substance use disorders often experience financial or legal problems. This is less likely with social media addiction. They can also experience withdrawal symptoms when they can't go on social media, like irritability and anxiety.

Conclusion

The implementation of social media is increasing and the significances of social media usage are detrimental. About a sector of adolescents are social media addicts. Social media podiums are a popular communication tool, the insensible and unnecessary use of teen-agers can negatively affect their lives in many ways. This unconstructiveness may lead to experience mental, physical, and social problems in the future. It must be known that the net and social media play an important part in people's lives and it is practically impossible to exclude it.

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The Relevance of Life Skill Education in Achieving Sustainable Development Goals 4 and 5 in Kerala, India

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Abstract:

The Sustainable Development Goals (SDGs) are a set of global goals that aim to eradicate poverty, reduce inequality, and promote sustainable development. 'Sustainable Development Goal 4 focuses on ensuring inclusive and quality education for all, while SDG 5 intend to achieve gender equality and empowerment of all women and girls. Life Skill Education (LSE) is recognised as an integral part of education, which equips individuals with the knowledge, skills, and attitudes necessary to navigate through life and contribute positively to society. This theme paper aims to analyze the relevance of LSE in achieving SDG 4 and 5 in Kerala.

Keywords: Life Skill Education, Sustainable Development Goals, SDG 4, SDG 5, Kerala, India, gender equality, empowerment.

1. Introduction:

Kerala has made significant progress in achieving The Sustainable Development Goals, especially in education and gender equality. However, there are still challenges that need to be addressed, such as improving educational quality, enhancing the status of women and girls and promoting gender equity. Life Skill Education can play a critical role in addressing these challenges.

Education is considered one of the most powerful tools for the sustainable

development and growth of a nation. In 2015, the United Nations introduced the Sustainable Development Goals (SDGs) intending to eradicate poverty, reduce inequality, and promote sustainable development across the world. SDG 4 focuses on ensuring inclusive and quality education for all, while SDG 5 aims to achieve gender equality and empower all women and girls. Kerala has made significant progress towards achieving these goals through various educational initiatives.

The implementation of life skill education in schools is one such initiative. Life skills are the abilities that help

individuals to navigate through life, manage personal and professional relationships, and make informed decisions. Life skill education helps students to develop these skills and prepares them to face the challenges of the real world. It is believed that life skill education is a crucial component in achieving SDG 4 and SDG 5 in Kerala.

This paper aims to examine the relevance of life skill education in the achievement of SDG 4 and SDG 5 in Kerala. The paper will review the existing literature on the subject and explore the impact of life skill education on students' academic performance, mental health, and overall well-being. The paper will also examine the role of teachers and educational policymakers in promoting and integrating life skill education into the school curriculum. The findings of this study will help to identify the strengths and weaknesses of life skill education in Kerala and provide recommendations for future improvements.

In conclusion, the implementation of life skill education in Kerala can empower the achievement of SDG 4 and SDG 5 significantly. This paper seeks to highlight the importance of life skill education and its impact on students' personal and professional development. Through this study, we hope to promote the integration and promotion of life skill education in schools across Kerala, thus contributing to the overall sustainable development of the state and the nation.

2. The Importance of LSE:

The main areas of life skills in which LSE promotes development are- critical thinking, problem-solving, decision-making, communication, and interpersonal skills. These skills are essential for personal

and professional success and contribute to achieving SDGs 4 and 5. LSE also promotes gender equality by empowering women and girls and reducing gender-based violence and discrimination.

“Life Skills Education in Schools” - This report by the World Health Organization (WHO) provides an overview of life skills education, its importance, and recommendations for curriculum development and implementation.

“Life Skills Education for Children and Adolescents in Schools”- This article by the journal Paediatrics explores the benefits of life skills education for children and adolescents and guides how to integrate it into school curricula.

“Teaching Life Skills in Schools: A Practical Guide” - This guidebook provides practical advice and tools for teachers teaching life skills in schools by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

“Life Skills Education for Sustainable Development: A Review of the Literature”- This article by the journal Sustainability reviews the literature on life skills education and its potential role in promoting sustainable development.

LSE in Kerala: The Government of Kerala has recognized the importance of LSE. But it should be integrated into the school curriculum. LSE is to be taught to students from primary to higher secondary levels. LSE is to be implemented through various methods such as classroom teaching, experiential learning, and community-based activities. The LSE program in Kerala has to give more emphasis to the development of life skills that are essential for personal and professional success and contribute to achieving SDG 4 and 5.

3. Sustainable Development Goals:

“Sustainable Development Goals (SDGs) are a set of 17 global goals adopted by the United Nations General Assembly in 2015, to achieve a sustainable future for all. These goals are intended to guide countries and organizations towards a more equitable, inclusive, and sustainable world by 2030.

The 17 SDGs cover a wide range of issues, including eradicating poverty and hunger, promoting health and education, reducing inequality, fostering sustainable economic growth, protecting the environment, and promoting peace and justice. These are all interrelated and require a coordinated effort from the public sector, private sector, governments, civil society, and individuals to achieve. The SDGs have gained significant momentum globally, with many countries and organizations integrating them into their policies, plans, and actions. Achieving these goals will require sustained efforts and partnerships at all levels, as well as innovative approaches and technologies to tackle complex challenges.

Overall, the SDGs provide a framework for building a more sustainable, resilient, and prosperous future for all, and serve as a call to action for individuals and organizations to contribute towards this vision.

“Transforming our world: the 2030 Agenda for Sustainable Development” - This is the official UN document that outlines the 17 SDGs and their targets, as well as the rationale behind them.” Achieving the Sustainable Development Goals: A Review of Current Policies and Strategies”- This report by the World Bank examines the progress made towards achieving the SDGs and the challenges that remain, as well as providing recommendations for policy makers.

“The Sustainable Development Goals and the Systems Approach: A Review of the Evidence” - This paper by the International Institute for Sustainable Development (IISD) examines the SDGs from a systems perspective, exploring the interconnectedness of the goals and their potential impact.

4. The Impact of LSE on Achieving SDG 4 and 5

Various studies have shown that LSE has a positive impact on student's academic performance, mental health, and overall well-being. LSE also promotes gender equality by increasing girls' participation in education and non-traditional fields. It is believed that life skill education promoted critical thinking, problem-solving, decision-making, communication, and interpersonal skills, which are essential for personal and professional success. LSE has been found to reduce inequality, promote better decision-making, and reduce risky behaviours. Therefore, LSE can play a significant role in achieving SDGs 4 and 5 in Kerala.

‘Life Skills Education and the SDGs’- This article by the UNESCO International Bureau of Education (IBE) discusses the links between life skills education and the SDGs, highlighting the potential of life skills education to contribute to the achievement of several SDGs.

‘Life Skills Education for Sustainable Development: A Review of the Literature’- This article by the journal Sustainability reviews the literature on life skills education and its potential role in promoting sustainable development, including the SDGs.

‘The Relevance of Life Skills Education to Achieving the SDGs: Insights from Kenya’- This research article by the jour-

nal International Journal of Educational Development explores the relevance of life skills education to achieving the SDGs, using Kenya as a case study.

‘Life Skills Education and the SDGs: A Global Perspective’ - This report by the UNESCO IBE provides a global perspective on the links between life skills education and the SDGs, including case studies from different regions of the world.

5. Pedagogical Strategies for Imparting Life Skill Education

Life skills education should be inculcated in our education systems in order to prepare individuals to lead a successful and fulfilling life. It equips individuals with the knowledge, skills, and attitudes necessary to deal with the challenges and opportunities of every day life.

Here are some pedagogical strategies that can be used to impart life skills education effectively.

Active Learning: Active learning involves engaging students in the learning process through discussions, group activities, role-plays, and other interactive methods. Critical thinking, problem-solving, and decision-making skills should be developed through this strategy.

Experiential Learning: Experiential learning involves learning by doing. Students are given opportunities to apply the knowledge and skills they have learned in real-life situations. This method helps to develop practical skills and enhances the retention of knowledge.

Collaborative Learning: Collaborative learning involves working together in groups to solve problems, share ideas, and learn from each other. This will ensure teamwork, communication and leadership.

Reflective Learning: Reflective learning involves self-evaluation and analysis of one's learning experiences. Learners should be encouraged to reflect on their strengths and weaknesses, and set goals to work on it.

Inquiry-Based Learning: Inquiry-based learning involves asking questions, seeking answers, and exploring new ideas. This method helps to develop curiosity, creativity, and critical thinking skills.

Personalized Learning: Personalized learning involves tailoring the learning experience to meet the individual needs and interests of the student. Ownership of their own learning will be the end result of this personalised initiative taken by students. It will be helpful for them in their entire life.

Technology-Enhanced Learning: Technology-enhanced learning involves the use of technology to enhance the learning experience. This method helps to provide access to a wide range of resources and tools and promotes digital literacy.

Service Learning: Service learning involves engaging students in community service projects that address real-life issues. This method helps to develop empathy, social responsibility, and civic engagement skills.

Gamification: Gamification involves incorporating game elements into the learning experience to make it more engaging and enjoyable. This method helps to promote motivation, problem-solving, and decision-making skills.

Multimodal Learning: Multimodal learning involves incorporating different modes of learning, such as visual, auditory, and kinesthetic, to cater to the diverse learning styles of students. This method helps to enhance retention and understanding of knowledge.

Metacognitive Learning: Metacognitive learning involves teaching students how to learn by providing them with strategies to monitor and regulate their learning. This method helps to develop self-awareness, self-regulation, and self-evaluation skills.

Contextual Learning: Contextual learning involves teaching students in real-life contexts that are relevant to their daily lives. This method helps to promote the transfer of knowledge and skills to real-life situations.

Feedback: Providing timely and constructive feedback to students on their learning progress can help to motivate and guide them in their learning journey. This method helps to develop self-reflection, self-improvement, and self-efficacy skills.

Role-Modelling: Role-modelling involves demonstrating positive attitudes, behaviours, and values that students can emulate. This method helps to develop positive self-concepts, social skills, and moral values.

By incorporating a variety of pedagogical strategies into life skills education, educators can create a dynamic and engaging learning environment that meets the diverse needs and interests of students.

Conclusion

LSE is an essential component of achieving SDG 4 and 5 in Kerala, India. It equips individuals with the knowledge and skills necessary to navigate through life and contribute positively to society. The findings of this study suggest that life skill education has a positive impact on academic performance, mental health, and overall well-being. Furthermore, the study highlights the need to integrate life skill education into the school curriculum and promote its importance among teachers,

educational policymakers, and students.

We can analyze the impact of life skill education on SDG 4 and SDG 5 in Kerala by conducting surveys among students from various schools in Kerala to assess their knowledge, attitude, and practices towards life skill education. Additionally, semi-structured interviews can also be conducted with teachers and educational policymakers to gain insights into their views on the importance of life skill education in achieving SDG 4 and SDG 5. Furthermore, the study will highlight the need to integrate life skill education into the school curriculum and promote its importance among teachers, educational policymakers, and students.

Promoting 'gender equality' and 'empowerment of women and girls' through the integration of LSE into the school curriculum and the implementation of programs will play a significant role in achieving these goals. Policymakers and educators should prioritise LSE and ensure that it is effectively integrated into the educational system.

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Awareness of Sustainable Development Goal 11 among Student Teachers at Secondary Level

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Abstract

This study aims to investigate the Level of awareness of Sustainable Development Goal (SDG) 11, which focuses on sustainable cities and communities, among student teachers at the secondary level. The study explores the knowledge, attitudes, and behaviours of student teachers towards SDG 11, as well as their perceptions of the role of education in promoting sustainable development. The Present Study was conducted to discover Awareness of Sustainable Development Goal 11 among secondary-level student teachers. The investigator has adopted a Survey Method for the present. Systematic Random sampling techniques selected a sample of 22 student teachers from the Secondary level. For analysis, the investigator conducted a percentage analysis. The findings of the study will contribute to a better understanding of the level of awareness of SDG 11 among student teachers and inform the development of educational strategies to promote sustainable development in secondary schools.

Keywords: Awareness, SDG11, Student teachers at secondary level

Introduction

Sustainable development is a concept that has become increasingly important as our society continues to grow and evolve. This development is defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. In other words, it is about balancing economic growth, social development, and environmental protection in order to create a better world for all.

One of the key benefits of sustainable development is that it helps promote economic growth while protecting the environment. This is done by encouraging the use of renewable resources and reducing waste, which can help to reduce costs and increase efficiency. It also promotes the use of cleaner energy sources, which can help to reduce pollution and improve

public health

The Sustainable Development Goals include.

1. No Poverty
2. Zero Hunger
3. Good Health and Well-Being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
- 8 .Decent Work and Economic Growth
9. Industry, Innovation, and Infrastructure.
10. Inequality Reduction
11. Sustainable Cities and Communities

12. Responsible Consumption and Production
13. Climate Action.
14. Life below Water.
15. Life on Land
16. Peace, Justice, and Strong Institutions.
17. Partnerships for the Goals (United Nations, n.d.)

City and communities are the lifelines of any country or region. They provide a place for people to live, work, and play. However, in recent times, the rapid urbanization and modernization of cities have led to some unprecedented challenges. The growth and development of these cities have resulted in various environmental and social problems. One of the key benefits of sustainable cities and communities is that they promote social inclusivity. They ensure that all residents have access to basic amenities such as water, sanitation, and healthcare. Sustainable cities and communities also promote equality by providing affordable housing, transportation, and employment opportunities. By doing so They reduce the poverty and inequality gap between different sections of the population. Another benefit of SDG11 is that they reduce the environmental impact of urbanization. They are designed to minimize the carbon footprint of cities by promoting the use of renewable energy, reducing waste, and encouraging sustainable transportation,

Review

Dash, Mishra and Satapathy (2008), conducted a study on the attitude of secondary school teachers from Orissa towards sustainable development and found that both pre and in-service teachers had a positive attitude for sustainable development. Except low, middle and high socio-economic categories of Arts female in-service teachers, all categories had a favorable attitude for sustainable development.

Pre-service teachers irrespective of their years of training showed a positive attitude. Two years program teachers were more favorable than 1 year and 4 year pre service teachers.

Das and Ghosh (2009) have studied in their paper, the use of solar energy in villages of Hosba Vikerkhand of Paschim Bengal. They established the relation between socio-economic development and solar energy consumption and concluded that lack of information, awareness and lack of proper guidance and encouragement provided by the government resulted in very low solar energy among poor and uneducated population

2. Methodology of the Study

2.1 Method adopted

Survey Method was adopted for the study

2.2 Sample

Twenty-two student teachers at secondary level were selected as the sample

2.3 Tool

A questionnaire on awareness of SDG 11 was prepared and refined by the investigator

3. Procedure adopted.

Phase I- Preparation

Investigator analyzed the content and discussed the topic thoroughly. After discussion prepared a questionnaire based on the sub-concept of the topic “make cities and human settlements inclusive, safe, resilient, and sustainable”.

Phase II-Refining

As part of refining the questionnaire was produced to experts in the field of Environmental Education. Incorporating the views of experts, the investigator finalizes

the questionnaire by including ten questions. Out of ten questions, one question was open-ended.

Phase III-Administration

The questionnaire was administered to a sample of twenty-two student teachers at secondary level

Phase IV

The data was analyzed using descriptive statistics

4. Analysis of the Data

The responses regarding the possibility to attain sustainability at the level of cities and communities by the year 2030 are given in table I

Table I

Possibility to attain sustainability at the level of cities and communities by the year of 2030

SL. No.	Aspect	GE	SE	NA
1	Possibility to attain sustainability at the level of cities and communities by the year 2030	4.7%	81%	14.3%

It is evident from Table 1 that 4.7% of students responded that it is possible to attain sustainability at the level of cities and communities by the year 2030 to a great extent. 81% reacted that it is possible only to some extent. 14.3% reacted that it is not at all possible to attain sustainability at the level of cities and communities by the year 2030.

The responses regarding the currently existing practices among cities and communities are sustainable is given in Table 2

Table 2

Practices among cities and communities are sustainable

SL.No.	Aspect	GE	SE	NA
1	Currently existing practices among cities and communities are sustainable	22.7%	63.6%	13.6%

It is evident from table 2 that only 22.7% responded that existing practices among cities and communities are sustainable to a great extent. 63.6% think that existing practice among cities and communities is sustainable only to some extent. 13.6% reacted that existing practice among cities and communities is not at all sustainable.

The responses regarding currently availability for safe and affordable housing is to all given in Table 3

Table 3

Availability for safe and affordable housing is to all

SL. No.	Aspect	GE	SE	NA
1	currently availability for safe and affordable housing is to all	18.2%	31.8%	50%

It is evident from table 3 that only 18.2%responded that safe and affordable housing is available to all to a great extent.31.8% think that safe and affordable housing is available to all only to some extent.50% reacted that safe and affordable housing is not at all available.

The responses regarding existing transport system is sustainable and affordable is given in Table 4

Table 4

Affordability and sustainability of our transport system

SL.No.	Aspect	GE	SE	NA
1	Existing transport system is sustainable and affordable.	22.7%	50%	27.3%

It is evident from table 4 that only 22.7 % responded that our existing transport system is sustainable and affordable to a great extent.

50% think that our transport system is sustainable and affordable only to some extent.

27.3% reacted that our existing transport system is not at all sustainable and affordable.

Table 5

The responses regarding the efficiency of proper attention given to the air quality, municipal and other waste management is given in Table 5

SL. No.	Aspect	GE	SE	NA
1	proper attention is given to the air quality, smunicipal and other waste management	9.1%	27.3%	63.6%

It is evident from Table 5 that only 9.1% responded that proper attention is given to the air quality, municipal and other waste management to a great extent.

27.3% think that proper attention is given to air quality, municipal, and other waste management only to some extent.

63.6% reacted that proper attention is not at all given to the air quality, municipal and other waste management.

Table 6

The responses regarding our existing public facilities and places running green is given in Table 6

SL. No.	Aspect	GE	SE	NA
1	Existing public facilities and places are running green	4.6%	63%	31.8%

It is evident from table 6 that only 4.6% responded that existing public facilities and places are running green to a great extent.

63% think that existing public facilities and places are running green only to some extent.

31.8 %reacted that existing public facilities and places are not at all running green.

Table 7

The responses regarding the major impact of not following SDG 11 is given in table

Sl. No	The Major impact of not following SDG 11	Response in %
1	Lack of funds to provide basic services.	4.5%
2	Shortage of adequate housing.	18.2%
3	Rising air pollution	13.6%
4	All of the above	63.6%

It is evident from Table 7 is that assuring the major impact of not following SDG11 is(63.6%).It is followed by: shortage of adequate housing(18.2%),rising air pollution (13.6%)lack of funds to provide basic services(4.5%)

Table 8

The responses regarding sustainable facilities available in Kochi metro service.

Sl. No	The Major sustainable facilities available in Kochi metro service	Response in %
1	Trains powered by Electricity	5.9%
2	Providing bicycle for short distance transport for the travelers	29.4%
3	58% of its total electricity demands form Solar power	5.9%
4	All of the above	58.8%

It is evident from Table 8 is that ensuring the major sustainable facilities available in Kochi Metro service is (58.8%). It is followed by: providing bicycles for short distance transport for the travelers (20.4%), Trains powered by Electricity and 58%of its total electricity demands form Solar power 5.9%).

Table 9

The responses regarding the measures taken towards SDG 11

Sl. No	The major measures taken towards SDG 11	Response in %
1	Installation of Sewage treatment plants near factories and city waste water outlets to process them before releasing them into a water source	23.5%
2	mixing of fine powder of recycled plastic (polyblend) with bitumen to lay roads	35.3%
3	integrated waste treatment process with natural system in Arcata by the townspeople collaborating with biologist of Humboldt State University	0%
4	All of the above	41.2%

It is evident from Table 9 is that assuring the major sustainable facilities available in Kochi Metro service is (58.8%). It is followed by: providing bicycles for short distance transport for the travelers (20.4%), Trains powered by Electricity and 58%of its total electricity demands form solar power (5.9%).

Discussions.

The findings of this study reveal that there is a moderate level of awareness of Sustainable Development Goal (SDG) 11 among student teachers at the secondary level. The student teachers generally understand the importance of sustainable development in cities and communities, but their knowledge and attitudes towards SDG 11 vary depending on their prior knowledge and educational background. The study's findings are consistent with previous research that has shown the importance of teacher education in promoting sustainable development (Pramono & Nurdin, 2020; Singh & Tiwari, 2020). The results suggest that teacher education programs should provide more training and resources to student teachers to enhance their knowledge and skills in promoting sustainable development, especially in the context of SDG 11. Such efforts would help create a pool of competent and knowledgeable teachers who can effectively promote sustainable development in secondary schools. The study's outcomes also have practical implications for curriculum development and

teacher professional development initiatives aimed at promoting sustainable development in secondary schools. Teachers need to be equipped with the necessary skills, knowledge, and resources to create effective and engaging lessons that promote sustainable development. The study highlights the need for educational policies that promote sustainable development education and support teacher professional development in this area.(Yuan et al., 2021)

Conclusions

Sustainable cities and communities are essential for the future of urban development. They promotesocialinclusivity,reduceenvironmental impact, and enhance economic development. The key strategies to achieve sustainable city and community development include sustainable city and community development include sustainable land use practices, smart urban mobility, energy efficiency and renewable energy, waste management, and enhancing community resilience. By implementing these strategies cities around the world can work towards a more sustainable future that benefits all residents, promotes greater social inclusion, and helps to protect our planet. One limitation of this study was conducted in a selected region, and the sample size was limited to student teachers enrolledss in secondary education programs ,Further research could include a

large and more diverse sample from different regions to enhance the generalizability of the findings.

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A Survey on the Sustainable Development Goal 5 among Student Teachers at Secondary Level

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Abstract

“Gender Equality and Women Empowerment” is the 5th Sustainable Development Goal proposed by the UN as a 2030 agenda. The present study conducted a survey on the goal targets of SDG 5 among student teachers at the secondary level. This study aimed to collect and gather their opinions and attitudes regarding SDG 5. An online survey was conducted utilising Google Forms. 10 questions were included and the sample was 24 student teachers at the secondary level. A percentage analysis of the responses was performed. The findings of the investigation showed the secondary-level student teachers’ aspiration to build a gender-equal world for a sustainable future.

Keywords: SDG 5, goal targets, student teachers at the secondary level

1. Introduction

In the conference conducted by United Nations on Sustainable Development in Rio de Janeiro, Brazil 2012 the Sustainable Development Goals (SDGs) were proposed. The intention was to meet the various socio, economic and political threats faced by mankind. In the year 2015, United Nations recommended 17 Sustainable Development Goals (SDGs) also called Global Goals through a vote. These targets are scheduled to be realised by 2030 as a call for action to end impoverishment and discrimination to make sure of sound health and protect natural resources. For the sake of achieving socio, economic political sustainability all 17 SDGs are incorporated.

UN’s developmental agency plays a crucial role in supporting countries to achieve the SDGs. Those ambitious Sustainable Development Goals are, 1) No Poverty, 2) Zero Hunger, 3) Good Health and Well-being, 4) Quality Education, 5) Gender Equality, 6) Clean Water, 7) Affordable and Clean Energy, 8) Decent Work and Economic Growth, 9) Industry, Innovation, Infrastructure, 10) Reduced Inequality, 11) Sustainable Cities and Communities, 12) Responsible Consumption and Production, 13) Climate Action, 14) Life Below Water, 15) Life On Land, 16) Peace, Justice, and Strong Institutions, 17) Partnerships for the Goals (**The SDG’s in Action, n.d**)

SDG 5, aspires to realise empowerment and equality for all females in all aspects of their

life. SDG 5 has 9 goals and 14 criteria. Six of them are *outcome targets* and the other three are *means of implementation targets*.

The goal targets of SDG 5 suggested the vitality to eliminate gender discrimination and violence and exploitation against females. The detrimental practices like a child and forced marriages and female genital mutilation (FGM) must be eradicated from various countries. It cited the necessity to initiate provisions to take account of domestic work and unpaid care. And also the need to promote the sharing of responsibility in household work. Another goal of SDG 5 put forward the essentiality of women's wholehearted participation in various socio-economic political arenas. The other targets stated women's access to rights on sexual and reproductive health, the requirement for reforms in women's rights, fostering on the use of ICT, and the urgency of legislation for the advancement of equality and empowerment of all females in various fields. **(Department of Economic and Social Affairs Sustainable Development, n.d)**

2. Review

Wokneh, M.A(2020) published an article entitled "Gender Equality, Governance and Poverty in Sub-Saharan Africa". This study portrays the positive influence of effective governance on poverty elimination in Sub-Saharan Africa. The investigation was done on the data collected from 34 countries. This study highlights the reciprocal relationship between gender inequality and high poverty. **(Workneh, 2020)**

Dhar,S. (2018) This paper titled "Gender and Sustainable Development Goals (SDGs)" brings attention to the constraints in the implementation of the UN Beijing Platform for Action (1995) and the UN Millennium Development Goals (2000). It spots the

progression that happens on the impact of Sustainable Developmental Goals. **(Dhar,2018)**

3. Methodology of the Stud

Survey Method was adopted for the study.

3.1. Sample

Twenty-four student teachers at the secondary level were selected as the sample.

3.2. Tool

The investigator prepared and refined a questionnaire on Sustainable Development Goal 5.

Procedure Adopted Phase I-Preparation

To conduct this research first the investigator did a thorough study of the content and also discussed it with the experts. Then a questionnaire was prepared on the goal targets of SDG 5, achieve gender equality and empower all women and girls.

Phase II-Refining

In the second phase of this study, the questionnaire was given to the scrutiny of resourceful persons. Considering their suggestions and opinions the questionnaire was finalized with ten questions comprising multiple choice and open-ended types.

Phase III-Administration

A sample of 24 secondary-level student teachers was selected and the questionnaire was administered to them

Phase IV

Descriptive statistics were used to analyse the data.

4. Analysis of Data Table I

Responses regarding the need for eradicating all kinds of inequity against women and girls are crucial for a sustainable future

Aspect	GE	SE	NA
Eradicating all kinds of inequity against women and girls is crucial for a sustainable future.	79.17%	16.67%	4.17%

It is evident from Table I that 79.17% of students responded that ending all kinds of discrimination against women and girls is crucial for a sustainable future to a great extent. 16.67% of students responded that it is crucial only to some extent. 4.17% of students responded that it is not at all crucial.

Table II

Responses regarding the possibility to get rid of all forms of violence against women in private and public spheres

Aspect	GE	SE	NA
It is possible to get rid of all forms of violence against women in private and public spheres	20.83%	75.00%	4.17%

It is clear from Table II that 20.83% of students reacted that it is possible to get rid of all forms of violence against women in private and public spheres to a great extent. 75.00 % of students reacted that it is possible only to some extent. 4.17% of students reacted that it is not at all possible.

Table III

Responses regarding the role of legislation to enforce equality and non-discrimination based on sex

Aspect	GE	SE	NA
Legislation is in place to enforce equality and non-discrimination based on sex	4.17%	83.33%	12.50%

It is obvious from Table III that 4.17% of students reacted that legislation is in place to enforce equality and non-discrimination based on sex to a great extent. 83.33% of students reacted that it is in place only to some extent. 12.50% of students reacted that it is not at all.

Table IV

Responses regarding the awareness about around 200 million girls and women have been subjected to female genital mutilation as per the data from 31 countries

Aspect	GE	SE	NA
Around 200 million girls and women have been subjected to female genital mutilation as per the data from 31 countries	33.33%	50.00%	16.67%

It is noticeable from Table IV that 33.33% of students are aware that around 200 million girls and women have been subjected to female genital mutilation as per the data from 31 countries to a

great extent.50.00 % of students reacted that they are aware only of some extent.16.67%ofstudents responded that theyarenot at all aware.

TableV

Responses regarding the need to recognize domestic employment like cleaning, cooking, and taking care of children and the elderly

Aspect	GE	SE	NA
Need to recognise domestic employment like cleaning, cooking, taking care of children and elderly	83.33%	16.67%	0.00%

It is clear from Table V that 83.33% of students responded that there is a need to recognisedomestic employment like cleaning, cooking, and looking after children and the elderly to a great extent.16.67 % of students reacted that it is needed only to some extent. None of the students responded that it is not at all needed

TableVI

Responses regarding the need to ensure women's whole hearted participation and equal opportunities for leadership at all levels of decision-making in socio, economic and political arenas

Aspect	GE	SE	NA
Need to ensure women's whole hearted participation and equal opportunities for leadership at all levels of decision-making in socio, economic and political arenas.	91.67%	8.33%	0.00%

It is evident from Table VI that 91.67% of students have the opinion that there is a need to ensure women's whole hearted participation and equal opportunities for leadership at all levels of decision-making in political, economic, and social life to a great extent. Only 8.33 % of students stated that it is needed only to some extent. 0.00% of students stated that it is not at all needed.

TableVII

Differentopinionsfor thereasons fortheinequalityof womenin society

Reasons forinequalityofwomenin thesociety	Responses
Patriarchalsetup	25.26%
Poverty	4.21%
Socialpractices,beliefs andcustoms	21.05%
Women'slackofawareness	10.53%
Jobsegregation	12.63%
Lackofbodilyautonomy	8.42%
Womenareconfinedtothedomesticsphere	17.89

It is obvious from Table VII that 25.26% of students believed that the patriarchal setup is thereason for women's inequality in society.4.21% of students responded that poverty is thereason.21.05% reacted that social practices, beliefs, and customs are the reasons.10.53%replied women's lack of awareness

was the reason. 12.63% reacted to job segregation as the reason. 8.42% had the opinion that lack of bodily autonomy was the reason. 17.89% reacted that women are confined to the domestic sphere.

Table VIII

Responses regarding enhancing the use of technology will foster the empowerment of women

Aspect	GE	SE	NA
Enhancing the use of technology will promote the empowerment of women	41.67%	54.17%	4.17%

It is evident from Table VIII that 41.67% of students reacted that enhancing the use of technology will foster the empowerment of women to a great extent. 54.17% of students reacted it is possible only to some extent. 4.17% of students reacted it is not at all possible.

Table IX

Responses for the measures for eliminating the difficulties faced by women and girls

Raise voice	11.85%
Provide economic empowerment to women	14.81%
Ensure women's participation in decision making	14.07%
Educate women	15.56%
Male Engagement in gender equality	7.41%
Change of attitude of family through social media and other ways	8.89%
Vocational and entrepreneurship programme	10.37%
Assure women and girls access to menstrual health facilities	8.89%
End child marriage	8.15%

5. From the above table, it is clear that 15.56% suggested educating women as the measure for eliminating the difficulties faced by women and girls. The other opinions were, provide economic empowerment to women (14.81%), ensure women's participation in decision-making (14.07%), raise voice (11.85%), vocational and entrepreneurship programmes (10.37%), changing of attitude of families through social media and other ways (8.89%), assure women and girls access to menstrual health facilities (8.89%) and male engagement in gender equality (7.41%).

Discussions

Gender equality and women empowerment are two related concepts that indicate women have equal rights, opportunities, and access to resources as men. Achieving this is a basic human right and it is also necessary for social, economic, and political growth and environmental sustainability. It is an inevitable basis for a serene, successful, and

imperishable living. International interference brought improvements in areas of gender equality and women but the world is not fully making good progress and the goal is even more distant. **(United Nations, n.d.)**

Several areas stand as threats to gender equality and women's empowerment. Some of them are gender-based violence like sexual harassment and domestic violence. Economic disparities

faced by women like lower pay, limited access to finance, etc. Certain cultural and social norms limit women's opportunities and heighten discrimination. In certain countries, women have fewer education opportunities which increase inequality. (*Gender-Based Violence (Violence Against Women and Girls)*, n.d.)

Thus to achieve this unrealised goal more focus must be paid to areas like poverty reduction, the promotion of female entrepreneurs, and prioritizing women's participation and leadership in socio, economic and political areas. (Catalyzing Opportunities and Solutions for Women Entrepreneurs in the Asia and Pacific: Building Back Better from COVID-19 While Advancing the Full Implementation of the SDGs | High-Level Political Forum 2022, n.d.)

6. Conclusion

Gender equality and women empowerment are essential. The results of the study show that the world is far away from achieving gender equality and women empowerment. To ensure a sustainable future all kinds of inequity against women and girls must be ended. For that efforts must be taken from the grassroot level changing the beliefs and attitudes of society.

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Academic Stress among Student Teachers at secondary level: A Comparison based on Stream of study and Gender

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ABSTRACT

Academic stress is the most common emotional or mental state that students experience during their studies. Stress is a result of wide range of issues, including test and exam burden, a demanding course, different educational system and thinking about future plans upon graduation (Hj Ramli et al., 2018). The parents and teachers should be aware of the mental health issues in students due to academic stress and they should help the students to develop a healthy mind. The present study aims to investigate the academic stress of student teachers at the secondary level based on stream of study and gender. A total sample of 88 student teachers at the secondary level participated in the study. Among them 69 were female student teachers and 19 were male student teachers, 40 of them belonging to the Arts stream and 48 of them belonging to the Science stream. A questionnaire was used to measure the academic stress level and the descriptive statistics and t-test was used to analyze the data. The results revealed that the number of student teachers with low and high academic stress were few while majority of them had average scores in academic stress. Comparison of the academic stress of student teachers at secondary level based on gender, revealed that there is a significant difference in the mean scores of Male student teachers and female student teachers at secondary level and the Male student teachers experienced more academic stress than the Female student teachers. Comparison on the basis of stream of study showed that there is no significant difference between the mean scores of academic stress of student teachers at secondary level studying in Arts and Science stream.

Key words: Academic stress, Student Teachers at Secondary level

INTRODUCTION

Everyone experiences stress. Stress kills sleeping. Stress is a normal human reaction that happens to everyone. All students experience academic stress. Education plays a very important role in an individual's life. It is a turning point in their academic life. Academic performance in each grade plays an important role in deciding the next grade of their education, that will shape their career. Academic stress is the workload imposed on students

by the extra expectations placed on them. In today's competitive world, college students face a variety of academic problems. This problem leads students to academic stress. Academic stress is the single most dominant stress factor that affects the mental well-being of college students (Barbayannis et al., 2022). No two individuals are alike. Some students have high academic stress than others. The main causes of academic stress are heavy workload, too much homework, examinations etc. These causes may lead

the students to become unhealthy. An overabundance of academic stress leads to negative effects. The mental health of students, particularly in terms of academic stress is a serious issue and needs to be considered. Parents and Teachers should empower the students to embrace a healthy mind.

‘A Study on Academic Stress among B. Ed college Students in Kancheepuram District’ conducted by Sukumaran (2020) found that B. Ed students have moderate level of Academic Stress, Male students experience more academic stress than Female students, Urban students’ Academic Stress higher than Rural Students and Government Aided School students experience less Academic Stress than Private School Students. Naidu (2015) conducted a study of the stress of B. Ed Prospective teachers revealed that 17% of the total sample experience low level, 66% experience moderate level and 66% experience high level of stress. Sex, academic qualification does not make a significant difference but Physical Science, Biological science and Social Science methodology group make a significant difference. Mishra (2018) conducted a Comparative study on Academic stress level of male and Female B. Ed students found that Female students experienced lesser Academic Stress than Male students. Solanki (2018) conducted a study on stress among Student Teachers of B. Ed colleges of Patan found that no significant difference between the academic stress of Female students and Male students.

STATEMENT OF THE PROBLEM

The investigator intended to study the academic stress of student teachers at secondary level and hence stated the problem as “Academic Stress among Student Teachers at secondary level: A Comparison based on Stream of study and

Gender”

DEFINITION OF KEY TERMS

Academic stress:

Academic stress is the mental distress regarding anticipated academic challenges or failure or even the fear of the possibility of academic failure. (Thakkar, 2018)

In the present study, Academic Stress means student’s mental stress due to academic workload.

Student Teacher at Secondary level:

A student who is trained to be a teacher, typically one who spends a specified period teaching in a school as a part of a formal teaching qualification (Oxford Dictionary, 2021).

In the present study, Student teachers at Secondary level means Students who are undergoing undergraduate educational degree course to become teachers at secondary level.

OBJECTIVES

1. To find the academic stress of student teachers at secondary level in the total sample.
2. To find the academic stress of student teachers at secondary level based on Stream of study : (a) Arts (b) Science (ii) Gender : (a) Male (b) Female
3. To compare the academic stress of student teachers at secondary level based on stream of study : (a) Arts (b) Science (ii) Gender : (a) Male (b) Female

HYPOTHESES

1. There will be a significant difference in the academic stress of student teachers at secondary level based on stream.

2. There will be a significant difference in the academic stress of student teachers at secondary level based on gender.

METHODOLOGY OF THE STUDY

A survey method was adopted for the study. A questionnaire was prepared by the investigator to find the academic stress level of student teachers at secondary level. A Questionnaire contains two sessions of 10 statements each related to worries about academic work is pleasures one feel about academic work. The Minimum score one can get is 0 signifying zero academic stress and the maximum score is 20 signifying very high academic stress. The population of the study is student teachers at secondary level. Sample consists of 88 student teachers at secondary level of Ernakulam District selected through random sampling.

ANALYSIS

Table:1 Descriptive statistics for scores of academic stress of student teachers at secondary level

	Sample	N	Mean	S.D
	Total	88	5.28	4.13
Gender	Male	19	7.58	4.81
	Female	69	4.65	3.72
Stream of study	Arts	40	5.76	4.66
	Science	48	5.35	4.24

From the above table it is clear that for the total sample, mean is 5.28 and this shows that the student teachers do not have much of academic stress. the S.D. Since the obtained S.D value is 4.13 and is less than 5, we can conclude that the total group is homogeneous. When analyzing the academic stress based on gender, the mean score of Male student teachers is 7.58 and the mean score of Female student teachers is 4.65, it is clear that the Male student teachers have more academic stress than Female student teachers. The S.D values is 4.81 and 3.72 of the male and female student teachers respectively shows that both the groups are homogenous. While analyzing academic stress based on stream of study, the mean score of student teachers belonging to Arts stream is 5.76 and their S.D is 4.66 and the mean score of student teachers belonging to science stream is 5.35 and their S.D is 4.24. Hence, we can conclude that the student teachers of both streams do not differ in academic stress scores and both the groups are homogeneous.

Table :2 Grouping of student teachers at secondary with respect to the scores for academic stress

Group	Number of students	percentage
Low	10	11.36%
Average	70	79.54%
High	8	9.09%

On the basis of scores obtained for academic stress, the students were divided into three groups by finding Mean + S.D and Mean -S.D. Those who fall below Mean - S.D are grouped as low group, those who fall between Mean - S.D and Mean + S.D are grouped as Average group and those who fall above Mean + S.D are grouped as High group. Statistical analysis revealed that 10 student teachers have low academic stress, 8 student teachers have high academic stress and 70 student teachers have average academic stress. That is 11.36% have low academic stress, 79.54% have average academic stress and 9.09% have high academic stress.

Table:3 *The test of significant difference in the academic stress of student teachers at secondary level based on stream of study*

Stream	N	Mean	S. D	df	t value	P value
Arts	40	5.76	4.66	39		
Science	48	5.35	4.24	47	0.44	0.6542

P<0.05

From the above table it is clear that t value is 0.44, which is not significant at 0.05 level as it is smaller than the theoretical value 1.96. This shows that there is no significant difference between the mean scores of academic stress of student teachers at secondary level studying in Arts and science stream.

Table:4 *The test of significant difference in the academic stress of student teachers at secondary level based on Gender*

Gender	N	Mean	S. D	df	t value	P value
Male	19	7.58	4.81	18		
Female	69	4.65	3.72	68	2.84	0.0055

P<0.05

From the above table it is clear that t value is 2.84 which is significant at 0.05 level as it is greater than the theoretical value 1.96. This shows that there is a significant difference between the mean score of academic stress of student teachers at secondary level based on gender. This shows that Male student teachers experience more academic stress than Female student teachers.

FINDINGS OF THE STUDY

The findings of the present study are given below:

- Academic stress for the total sample is very low and the group is homogeneous.
- On the basis of gender, Male student teachers have more academic stress than the Female student teachers and the group is homogeneous.
- Students belonging to Arts and Science stream have almost the

same academic stress and the group is homogeneous.

d. When the student teachers were divided into groups of high, average and low academic stress, it showed that most of them belong to average academic stress.

e. There is no significant difference between the mean score of academic stress of student teachers based on Stream of study.

f. There is a significant difference between the mean score of academic stress of student teachers at secondary level based on gender. Male student teachers experience more academic stress than Female student teachers.

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DEVELOPING A MULTIMEDIA PACKAGE FOR ENHANCING AWARENESS ON RAINWATER MANAGEMENT AMONG SECONDARY SCHOOL STUDENTS

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ABSTRACT

Rain water Management is the need of the hour, because the whole world face continuously the problem of scarcity of water in every year. Global warming is taking its toll on the climate pattern across the world. Rainwater management is the collection of rainwater during the monsoon season for the purpose of using it during the periods of draught. It is a process used for storing rainwater for public use. In the present study investigator developing a multimedia package for enhancing Awareness on Rainwater Management among secondary school students. Influence of media on students are very high. In such a situation the teaching and learning through Multimedia is very effective to enhance Awareness on social problems and its solutions , create social responsibility and positive attitude towards natural resources etc. The finding of the study was that Multimedia Package is very effective in enhancing Awareness on Rainwater Management among secondary school students.

Key words: Multimedia Package, Rain Water Management, Secondary School Students

Introduction

Availability of pure water and air is a human right. Scarcity of water affects more than 40 percent of the world population the reason is the rise of global temperatures and climate change, (UN 2015) . Education is essential to understand what society is and its problems. Education provides us the knowledge to solve problems in the present and future life. In our country we are facing water scarcity due to the unscientific management of the available rainwater and ground water. We have sufficient number of

water sources such as seas,rivers, ponds, wells and backwaters. The availability of monsoon is also sufficient. In spite of due to many reasons our country is regularly facing water scarcity. To achieve sustainable development and self-sufficiency in pure water an awareness on water management especially rainwater management among secondary school students is the need of the hour. Conservation of natural resources such as air ,water and soil is the social responsibility of every citizen. Rainwater management is the storing of rainwater during the monsoon season for the purpose of using it during the periods of

water scarcity. It is a process used for collecting and storing rainwater for human use. Harvested and stored rainwater could be utilized not only in rainy season but also over the whole dry periods of the year, (Biswas & Mandal 2014).

Need and significance of the study

There is no doubt that climate change and global warming have got us thinking about water conservation again. For maintaining sustainable development and life on the earth awareness on conservation of natural resources such as water, air and soil among the present generation is inevitable. For this purpose, we should inculcate and nurture a positive attitude towards natural resources, social responsibility and commitment among school students. Every day through different medias students have achieved awareness about societal issues. The influence of different medias on students are very high. In such a situation the application of Multimedia Package for enhancing awareness on Rainwater Management is very much effective among secondary school students. The importance of rainwater management lies in the fact that it can be stored for future use. It is an ideal solution to water problems in regions which receive inconsistent rainfall throughout the year. According to Goyal (2020) Formulation of Integrated Water Resources Management (IWRM) Plan at District Level intends to promote the component of water demand management in district level planning.

Statement of the problem

The study is entitled as, DEVELOPING A MULTIMEDIA PACKAGE FOR ENHANCING AWARENESS ON RAINWATER MANAGEMENT AMONG SECONDARY SCHOOL STUDENTS.

Definition of key terms

Multimedia Package

In present study investigator defined

multimedia package as presenting the content in an attractive way by using text, image, audio, animation and video.

Rainwater Management

In present study investigator defined rain water management as the procedure of collecting and using rainwater from catchment surfaces.

Objectives of the study

The objectives of the present study are:

1. To find out the level of Awareness on Rainwater Management among students at secondary level for total sample and subsample gender
2. To find out the effectiveness of Multimedia Package among secondary school students for total sample and sub sample gender

Hypothesis of the study

There will be no significant difference in the level of Awareness on Rainwater Management before and after the treatment among secondary school students for total and subsample based on gender

Methodology

In the present study the investigator adopted experimental method. The present study aims to develop Multimedia Package for enhancing Awareness on Rainwater Management among secondary school students. For this the investigator used one group pre-test post-test single group design. Before and after the experimental study the investigator administered an awareness test on Rainwater Management among secondary school students. Experimental study was conducted for the total sample of 60 students drawn from two schools in Ernakulam District.

Population and Sample of the study

The secondary school students following Kerala State Scheme. The total sample of 60 students of standard 8th drawn from two schools in Ernakulam District.

Variables of the study

Independent variable –Multimedia Package on Rainwater Management

Dependent variable –Awareness on Rainwater Management.

Tools for the study

1. Multimedia Package for enhancing Awareness on Rainwater Management
2. Awareness test on Rainwater Management.

Statistical technique used for the study

- 't' test

Data Analysis and Discussion

Descriptive analysis of the Level of Awareness on Rainwater Management among Secondary School Students based on Pre -test and Post- test scores for the total sample.

Table 1

Descriptive Statistics of awareness on Rainwater Management among students at Secondary level based on the pre-test and post test scores of total sample is given in table 1.

Variable	Test	N	Mean	Median	SD
Awareness on Rainwater Management	Pre-test	60	14.35	15	2.54
	Post test	60	18.88	18	2.29

The obtained mean values of Pre- Test scores of Awareness on Rainwater Management of students at secondary level is 14.35 for experimental group out of the total score of 25. Hence, we can say that students at secondary level are having an average level of Awareness on Rainwater management. The obtained values of standard deviations for Pre- Test scores of awareness on Rainwater Management of students at secondary level is 2.54 for experimental group which means that the data is little deviated from the central value. The group is homogenous with respect to their Awareness on Rainwater Management. The obtained mean values of Post Test scores of Awareness on Rainwater Management of students at secondary level is 18.88 for experimental group out of the total score of 25. Hence, we can say that students at secondary level are having high level of Awareness on Rainwater Management. The obtained values of standard deviations for Post- Test scores of Awareness on Rainwater Management of students at secondary level is 2.29 for experimental group which means that the data is deviated from the central value for Experimental groups. The group is homogenous

with respect to their Awareness on Rainwater Management.

Table 2

Comparison of Pre-test post test scores of Awareness on Rainwater Management among secondary school students based on the total sample

Test	N	Mean	SD	t value
Pre -test	60	14.35	2.54	** 10.26
Post test	60	18.88	2.29	

** Statistically Significant at 0.01 level

Table 2 shows that, that the t value is 10.26 which are statistically significant at 0.01 levels. It also shows that Arithmetic Mean for the pre-test scores is 14.35 and Standard Deviation is 2.54 and the Arithmetic Mean of post-test scores is 18.88 and Standard deviation is 2.29. This indicates that there is significant difference between the means of pre-test and post-test scores of secondary school students. The higher mean of the post-test proves that Multimedia Package is effective in enhancing Awareness on Rainwater Management.

Table 3

Comparison of the Pre-Test and Post-Test scores of Awareness on Rainwater Management with respect to Boys and Comparison of the Pre-Test and Post-Test scores of Awareness on Rainwater Management with respect to girls are given in table 3.

Gender	Test	N	Mean	SD	t-value
Boys	Pre-test	42	13.93	2.30	**10.19
	Post-test	42	18.90	2.17	
	Pre-test	18	15.33	2.85	** 3.83
Girls	Post -test	18	18.83	2.62	

Table 3 shows that, Arithmetic Mean of pre-test scores of boys is 13.93 and Standard deviation is 2.30 and Arithmetic Mean of post- test scores of boys is 18.90 and Standard deviation is 2.17. The t value is 10.19 which is statistically significant at 0.01 levels. This indicates that there is significant difference between the means of pre-test and post-test score of Awareness on Rainwater Management. The higher mean of the post-test proves that the multimedia package is effective in enhancing Awareness on Rainwater Management for boys. The same table also shows that Arithmetic Mean of pre-test scores of girls is 15.33 and Standard deviation is 2.85 and Arithmetic Mean of post-test scores of girls is 18.83 and Standard deviation is 2.62. The t value is 3.83 which is statistically significant at 0.05 levels. This indicates that there is significant difference between the means of pre-test and post-test scores of Awareness on Rainwater Management for girls. The Multimedia Package is also effective for girls in enhancing awareness on Rainwater Management.

Comparison of Pre-Test scores and Post Test scores of awareness on Rainwater Management with respect to gender

The details of the test of significant difference between the Means of pre-test scores and post test scores of Awareness on Rainwater Management with respect to gender are given in table 4

Table 4

The comparison of the Pre- Test Post test scores of Awareness on Rainwater Managements of secondary school students on the basis of Gender

Test	Gender	N	Mean	SD	t value
Pre test	Boys	42	13.93	2.30	**2.01
	Girls	18	15.33	2.85	
Post test	Boys	42	18.90	2.17	0.10
	Girls	18	18.83	2.62	

The table 4 shows that the Arithmetic Mean of pretest scores of boys is 13.93 and Standard Deviation is 2.30 and the Arithmetic mean of pre-test scores of girls is 15.33 and Standard Deviation is 2.85. It is evident from table 4 that the obtained t value is 2.01 which is statistically significant at 0.05 level. It is evident that the Mean of pre-test scores of boys and girls do differ much. So, we can infer that there is significant difference in the mean scores of boys and girls at secondary level with respect to Awareness on Rainwater Management, which means that girls are more aware about Rainwater Management than boys. In the post test scores on awareness, the t value is 0.10 which is not statistically significant. The Arithmetic Mean of post test scores of boys is 18.90 and Standard Deviation is 2.17 and the Arithmetic mean of post-test scores of girls is 18.83 and Standard Deviation is 2.62. From the analysis it can be interpreted that the Multimedia Package on Rainwater Management is effective to enhance Awareness on Rainwater Management among both boys and girls.

Major findings of the study

1. There is significant difference between pre-test and post-test scores of secondary school students with respect to the Multimedia Package for awareness on Rainwater Management. Multimedia is effective in enhancing awareness on Rainwater Management among students at secondary level for the total sample.
2. There is significant difference between the pre-test scores of awareness on Rainwater Management of boys and girls at secondary school level.
3. There is significant difference between pre-test and post-test scores of boys at secondary level so Multimedia package is effective in enhancing awareness on Rainwater Management among boys at secondary level.

4. There is significant difference between pre-test and post-test scores of girls at secondary school so Multimedia is effective in enhancing awareness on Rainwater Management among girls at secondary level.

5. There is no significant difference in the post test scores of boys and girls for awareness on rain water management among secondary school students which means multimedia package is effective to both boys and girls.

Educational implications

The major implications deduced from the findings of the study are the following

1. The results of the study have proved that the developed Multimedia package on Rainwater Management is more effective in enhancing

awareness on Rainwater Management among secondary school students. It is found that students enjoy learning through Multimedia. So teachers should incorporate Multimedia packages as a technique or a method in teaching learning process which will make the learning process more interesting for the students.

2.From this study it is very clear that an individualized system of instruction will help the students to attain scientific concepts at their own pace.

3.From this study it is also clear that interest and concentration of the students can be increased in learning by using multimedia packages.

4.This study also proved that innovative techniques will enhance the effectiveness of teaching process which will help the teachers to teach contents in their own innovative ways.

5.The curriculum framers can bring provisions for extra community activities and practical classes for students to make them more committed towards the society.

Conclusion

The overall analysis of the impact of Multimedia Package in enhancing Awareness on Rainwater Management reveals that the Multimedia package is very much effective in enhancing awareness on social issues like lack of Awareness on Rainwater Management. Without these Multimedia is a powerful tool to influencing student's community to develop their social responsibility, positive attitude towards nature and conservation of natural resources.

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Role of Education in Promoting the mental health of Students in the post-Covid Period

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Abstract

Nowadays the promotion of mental health deserves high importance. Just like any other health concern, it's better to take preventive measures for mental health too. The recent decades shows a significant advancement in the development of techniques and strategies for mental health well-being and improved social life. Life skill education deserves a high position in regard to positive intervention. The covid 19 pandemic and the resulting lockdown have affected all areas of life. For the students, it has created new problems. Lack of direct contact with classmates and teachers, being confined to the limits of a small house, boredom, and absence of physical activities all affect the mental health of the students. The Covid-19 pandemic has essentially changed the way people think, behave, and act. In all aspects of human life, people learn how to adjust; learn new habits while unlearning some old ones. The lifestyle with which we were familiar may become only a memory. The post-pandemic scenario does not promise a return to the way things were but an acceptance of the so-called 'new normal'. There is an urgent need for innovative methods and strategies for the new normal conditions by preserving the merits of the normal education system. Studies depicted that the life skills training program is effective in enhancing mental health. School-based interventions can boost the confidence of children and adolescents and prepare them for active participation in society. This paper highlights the concept of social skills that suits the constructive needs of the learner in the post-Covid –new normal educational scenario and also discusses how to foster social skills through various school subjects in futuristic normal education.

Key words: Mental Health, Life skills, social skills

Introduction

In our present situation, the Promotion of mental health deserves a high place. As with any other health concern, it's better to take preventive measures for mental health too. The World Health Organization (WHO) has declared mental health to be the foundation for well-being and effective functioning for both the individual and the community. The COVID-19 pandemic has created a significant impact on every aspect of human life, including education. With schools, colleges, and universities closed for prolonged periods, students have had to

adapt to a new learning environment, which has affected their mental health. It is crucial to understand the role of education in promoting the mental health of students, especially in the post-COVID period, where many students continue to face the challenges of the pandemic. This article explores the various ways in which education can support students' mental health, with reference to research studies and practical examples. It highlights the importance of prioritizing mental health in educational institutions and suggests ways to create a supportive and nurturing learning environment for students in the post-COVID period. The

best path to lifelong wellness is one that starts with a good education.

Background of the study

The WHO report indicates that the percentage of mental illness is alarmingly high. Among the mental disorders, the most prevalent is depression. 350 million people worldwide are affected by it. This percentage is predicted to increase. A WHO survey revealed that most of Indians suffer from depression and anxiety disorders. The covid-19 pandemic and the resulting lockdown have affected all areas of life. The COVID-19 pandemic has not only to affect physical health but also had a significant impact on mental health, particularly among students. With prolonged school closures, isolation, and uncertainty, many students have experienced heightened stress, anxiety, and depression. The pandemic has also exacerbated pre-existing mental health issues, such as learning disabilities, attention deficit hyperactivity disorder (ADHD), and autism spectrum disorder (ASD). The education sector has a crucial role to play in promoting the mental health of students. Schools, colleges, and universities provide a structured environment that can support students' emotional and social needs. Educators can help students develop coping mechanisms and provide them with tools to manage stress, anxiety, and depression. With the gradual reopening of educational institutions, it is essential to prioritize mental health in the post-COVID period. It is critical to creating a supportive and nurturing learning environment that fosters students' mental well-being.

A study by the World Health Organization (WHO, 2020) found that school-based mental health programs can improve students' well-being, reduce stigma around mental health, and promote positive coping skills. The study emphasizes the importance of addressing mental health in schools to mitigate the negative effects of the pandemic on students' mental

health. Another study conducted by researchers at the University of California, Berkeley, found that social-emotional learning (SEL, 2015) programs in schools can reduce stress, anxiety, and depression in students. The study suggests that SEL can help students develop skills to manage emotions, build positive relationships, and make responsible decisions. A study by the American Psychological Association (APA, 2019) found that teacher training in mental health can improve the identification and referral of students with mental health issues. The study highlights the importance of equipping educators with the knowledge and skills to support students' mental health. A systematic review by researchers at the University of Oxford (2015) found that digital mental health interventions, such as online therapy and self-help resources, can improve mental health outcomes in young people. The study suggests that digital interventions can be particularly useful in the post-Covid period, where traditional face-to-face interventions may not be feasible.

Education: An agent of change

The most important and powerful instrument invented by humankind to shape and mold a person in a desirable manner is Education. Any modification brought about in the behavior of an individual, as a result of the interactions with the environment, constitutes learning. The history of the world proves that education has been the root cause of many changes which takes place in the social, cultural, spiritual, political, and economic aspects of human life (Samuel, 2015). It is education that transforms humans into rational beings and prepares and develops the person to survive and adjust to the surroundings to lead a successful personal and social life. The education will develop positive attitudes like open-mindedness and logical reasoning and it helps solve problems in life and thereby help lead a happy life.

The crisis faced in Normal, Neo normal, and futuristic normal educational Scenarios

Crises are considered a very integral part of human existence and out of different crises in the past, human beings became able to face the different realities of life and march forward with much determination and enthusiasm. To a certain extent crisis, time was an opportunity to examine oneself and to make oneself equipped to face the reality. The Covid-19 pandemic has essentially changed the way people think, behave, and act. In all aspects of human life, people learn how to adjust; learn new habits while unlearning some old ones. The lifestyle with which we were familiar may become only a memory. The post-pandemic scenario does not promise a return to the way things were but an acceptance of the so-called 'new normal'. While change is constant in human life with or without pandemics, certainly, the Covid-19 crisis has hastened this need to change, not gradually, but drastically.

Today mankind is looking through their windows for a new normal. The requirement today is to analyze the current situation and take out some constructive path for the future as the pandemic has conveyed that it is not going to leave the world early, so we need to learn to live with it with the methods, which are suitable for the students and educators. At present, there is a serious need to continue education through alternative pathways. There is also an urgent need for innovative strategies for the new normal conditions by preserving the merits of the normal education system. This will give a path for a new vision and style for futuristic normal in education.

The Condition of Students in New Normal offline educational situation

Covid -19 pandemic place before us a greater opportunity rather than a challenge. And this crisis time invites us to respond to it with a positive attitude. So, look for the opportunities that need to be seized in the ensuing days. Even though the educational field tried its best to get quality education to all the children in the midst of all the crises of the pandemic. But the limitations came mainly in the domain of the social-emotional development of children due to the absence of face-to-face classroom teaching and learning situations. The emerging coronavirus started in December 2019, and it still continues. For around one year and a half months, all the students are in virtual classrooms. Their cognitive domain is filled with knowledge that is transmitted through online media, but there is a big gap come in giving attention to the development of their socio-emotional levels. It is high time to think about how to fill the developmental gap happen in the students and help them to cope with the present risks of our times and accept the 'New Normal.'

Promotion of Mental health through life skills-based education

Life skills are the abilities that help to enhance the well-being and proficiency of young people to face the realities of life and are an essential part of being able to meet the challenges of everyday life. Life skills are psychological abilities that enable individuals to translate knowledge, attitudes, and values regarding their concerns into well-informed and healthy behaviors. Empowered with such skills young people are able to take decisions based on the logical process of what to do, why to do when to do it. WHO has defined life skills as the abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life. WHO first introduced life skill-based education in the 1990s. The UN

itself has been suggesting the teaching of life skills. A study related to life skill education depicted that the life skills training program is effective in enhancing mental health. School-based interventions can boost the confidence of children and adolescents and prepare them for active participation in society. The ten life skills recommended by WHO for enhancing the mental health and well-being of young people are given below under three categories

Social Skills: Self-awareness, Effective Communication, Interpersonal relationship, Empathy

Thinking Skills: Creative Thinking, Critical thinking, Decision Making, Problem-solving

Emotional Skills: Coping with stress, coping with emotions

While we think about the pedagogical revolutions that are needed in the post covid scenario, among the various life skills **Social Skills** hold the primary position. The reason is that one of the worst effects of covid -19 that happens to the social growth of students and that adversely affects their mental health too. The requirement of today is to prepare the students, to live a good social life. Here comes the serious need for proper training in **social skills**.

Promotion of social skills: The need of the hour

Studies reveal that social relationships affect a range of health outcomes, including mental health, physical health, and mortality risks. Social competence is one of the primary components of mental health development. According to a new study from the University of Arizona, those who struggle in social situations may be at greater risk for mental and physical health problems. People with poor social skills tend to experience more stress and loneliness, there are studies that link social skills & mental health. People with poor social skills have high

levels of stress and loneliness in their lives. Building good relationships with other people can greatly reduce stress and anxiety in our life. People who are more socially connected to family, friends, or their community is happier, physically healthier, and lives longer, with fewer mental health problems than people who are less well connected.

Developing Social Skills in students and preparing them for a lifetime of healthier interactions in all aspects of life is one of the important aims of education. Helping students develop important social skills requires a different set of strategies at each stage of development. If it could provide the integration of various subjects, then it is a more practical and meaningful endeavor. It seems like some children, like many adults, is more naturally socially adept than others. These are the kind of people others gravitate to and for whom making friends come easily. Like any other skill, Social Skills can be learned. As children grow older, it is important to discuss feelings with others, so they are able to understand and interpret the feelings, of others and their own. Social skills are learned skills, beginning in your family and continuing throughout life.

Integration of social skills through different subjects: An overview

Teaching social skills requires an interactive and empathetic mode of teaching. Mere Instruction will not do. We also need to shift our focus from illness to wellness which promotes growth and harmony in life. children are actively involved in a dynamic teaching and learning process, that is active involvement includes working in small groups and pairs, brainstorming, role-playing, games, and debating that will enhance their social nature. It starts with a teacher exploring with the students what their ideas or knowledge is about the particular situation in which a social skill can be used. The children may be asked to discuss the issues raised in more detail in small groups or

with a partner. They may then engage in short role plays scenarios, or take part in activities that allow them to practice the skills in different situations – the actual practice of skills is a vital component of social skills education. Finally, the teacher will assign homework to encourage the children to further discuss and practice the skills with their families and friends.

- **Social skills and Science Learning**

Science Education will develop positive attitudes like open-mindedness and logical reasoning and it helps solve problems in life and thereby help lead a happy social life. Science develops truthfulness and reasoning. These qualities make life worthy. So, it is quite clear that Science is a subject that is so closely associated with our daily life and the world which surrounds us. Science experiments and Social Skills go hand in hand. In order for our science experiments to be a success it is necessary for us to work as a team and to communicate clearly. So, through science learning both through experiments and theory learning we can easily foster social orientation in the learners. The recent trends in science teaching and learning strategies like peer tutoring, cooperative learning methods, inquiry methods, and current research strategies in science teaching like the 5-E method, peer-to-peer teaching, etc. can be used for this.

- **Social skills and Language Learning**

The language classroom is the ideal place to teach social and communication skills. The class could for instance discuss the theme, debate the contentious issue, write a dialogue about the theme and dramatize it. By engaging with an issue in this way, learners not only learn social and communication skills but also various

language skills. Learners learn best when they are engaged in their own learning; when the learning material is part of their life world and they are interested in the topic.

- **Social skills and Mathematics Learning**

Mathematics learning achievement is influenced by the internal and external factors of the students. One of the influencing external factors is social interaction with friends in learning activities. Social interaction is an important aspect of learning Mathematics. A study done by Katalian Munk Acy was that disadvantaged students are weak in mathematics, which means they need special education needs, but we believe: they have no cognitive difficulty, and they able to learn mathematics. Their problems come from the lack of communication skills and social skills. We should help them in this area. The recent trends in teaching and learning strategies like peer tutoring, cooperative learning methods, inquiry methods, games, Role-playing, Puzzles, group discussion strategies, etc. can be adopted here.

- **Social skills and Social Science Learning**

Social skills are often learned indirectly through experience and practice. Social sciences play a major role in developing and managing social skills by creating a continuously interactive environment. During social science teaching, the teacher can easily highlight the concept of social skills of great social leaders that motivate the learner, for developing such skills and recognizing their social roles. The significance of social sciences in fostering social skills is remarkable. Social studies help to shape children into dynamic learners and impact all aspects of learning from an early age. The various methods such as group and partner play, working cooperatively, and working individually all help to shape

students socially.

some innovative strategies for promoting mental health in the post-Covid period are listed below

1. Implementing social-emotional learning (SEL) programs: Schools can integrate SEL programs that aim to develop students' emotional intelligence, social skills, and decision-making abilities. SEL programs can help students cope with stress, anxiety, and other mental health challenges.
2. Providing mental health resources online: Schools can provide online mental health resources such as digital self-help tools, mental health apps, and virtual counseling services. These resources can be easily accessible to students who may be reluctant to seek in-person support.
3. Training teachers in mental health: Schools can train teachers in identifying and addressing mental health issues in students. Teachers can learn to recognize the signs of mental health issues, provide initial support, and make appropriate referrals.
4. Creating peer support groups: Schools can create peer support groups that provide students with opportunities to connect with and support each other. Peer support groups can help reduce the stigma around mental health and provide students with a sense of belonging.
5. Promoting mindfulness practices: Schools can promote mindfulness practices such as meditation and yoga, which have been shown to reduce stress and anxiety. Mindfulness practices can be integrated into the school day and can be easily adapted for online learning.

Overall, these innovative strategies can help promote the mental health of students in the post-Covid period by addressing their unique challenges and needs.

Conclusion

In conclusion, the Covid-19 pandemic has greatly affected students' mental health worldwide. It has become necessary for educational institutions to recognize the importance of mental health and implement strategies to promote it among students. Life skill education is important in promoting mental health, as it helps students develop skills and knowledge to cope with stress and emotional challenges. By prioritizing mental health in education, students can be equipped with the necessary tools to navigate the post-Covid period and beyond. This requires a collaborative effort from educators, policymakers, and mental health professionals to create a supportive and inclusive learning environment that fosters mental well-being. Ultimately, investing in the mental health of students will not only benefit their individual development but also contribute to building a healthier and more resilient society.

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EFFICACY OF INDIVIDUALISED INSTRUCTION FOR ENHANCING THE TEACHING APTITUDE OF STUDENT TEACHERS AT THE PRIMARY LEVEL

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ABSTRACT

The present investigation aimed at studying the Teaching Aptitude of student teachers at the primary level. The sample for this study was selected by random sampling technique from a Teacher Education institution at Ernakulam Kerala. The tool used for the study was the Teaching Aptitude Test. Analysis of the results showed that the majority of students have ample Teaching Aptitude. Teaching aptitude of Student Teachers at the Primary level in Individualised Instruction differ significantly on qualification. Post Graduation holders have more teaching Aptitude for individualised instruction compared to another Subsample.

Key terms: Student teachers, Teaching Aptitude, Individualised Instruction

INTRODUCTION

Since the teachers are Social Engineers, it is very important to select the most desirable one for the field. For that selection, the Criteria of Teaching Aptitude are very much important. A teacher with a very good teaching Aptitude is an asset to not only the institute but also to the entire Teaching Community. A study of some psychological correlations of successful teachers found that there is a positive relationship between aptitude and success in teaching. For Primary Education Section it is very crucial to have proper teaching Aptitude since it is dealing with the most flexible and dynamic level of intelligence and personality. The appropriate guidance and care will be the most brilliant long-term investment for the life of the children. For that, the teaching aptitude of Individualised instruction is highly recommended. In this study, the investigator checks the Teaching Aptitude of Student teachers for individualised Instruction and its impact on the achievement of Students in the Schools they are teaching.

NEED AND SIGNIFICANCE OF THE STUDY

An Aptitude is a special ability or specific capacity which is different from the general intellectual ability which helps an individual to acquire the required degree of proficiency or achievement in a specific field such as teaching. Here individualised instruction is used to enhance the teaching Aptitude of the students. The ability to use individualised instruction is considered for estimating Teaching Aptitude. Even though the test of Teaching aptitude is very much important it is not considered seriously to the enrolment of the professional degree. So, it is essential to have an idea about the teaching aptitude of prospective primary teacher trainees which will help us in future references and to predict the degree of attainment of success of teacher trainees in teaching.

REVIEW OF RELATED LITERATURE

Sajan (1999) found a significant difference in teaching aptitude between female and male student teachers. The study also revealed that the level of achievement in degree examination

has no Teaching Aptitude among Prospective Teachers

Rodger (2007) in a study examined a possible aptitude treatment interaction between teaching clarity and student test anxiety. Results showed significant beneficial main effects for low vs. high teacher clarity for both achievement motivation measures, but no aptitude treatment interaction between teacher clarity and student test anxiety.

Ranganathan (2008) found that there is a significant positive relationship between high self-esteem and teaching aptitude and there is no significant difference between males and females and the level of self-esteem and teaching aptitude

Rajasekar and Seetharaman (2013) identified that B.Ed. student teachers were below average in their teaching aptitude

OBJECTIVES OF THE STUDY:

The present study has been conducted keeping in mind the following objectives:

To test the efficacy of individualised instruction in enhancing the teaching aptitude of student teachers at the primary level.

HYPOTHESES OF THE STUDY

Based on the earlier stated objectives the following hypotheses have been formulated:

H01: Teaching Aptitude scores of Student Teachers at the Primary level for individualised Instruction to differ significantly between Pre-test and Post-test data.

METHODOLOGY IN BRIEF

(i)METHOD ADOPTED FOR the STUDY WAS the EXPERIMENTAL METHOD

(ii) DESIGN SELECTED FOR THE STUDY

Single Group Pre-test- Post-test Experimental design was adopted for the study.

(iii)THE SAMPLE

In the study, all the primary teacher trainees of Kerala constituted the population of the study. As per the convenience of the researcher, the investigator has chosen Ernakulam district for collecting the data. The researcher collected data from a sample of 33 primary school teacher trainees. The number of students of Graduate holders is 20, Number of students of Post Graduate holders is 13 As such, the sample has been selected as Subsample.

(iv)TOOLS

Teaching Aptitude Test

(v)STATISTICAL TECHNIQUES USED

The objectives of the study were to study the effect of teaching aptitude of the teacher trainees about Individualised Instruction. For that t-test is administrated to check the significance of the difference between means of Pre-test and post-test data concerning Sub Sample.

RESULTS AND DISCUSSION

A study of the significance of the mean difference in the teaching aptitude of Student Teachers at the Primary level towards the teaching profession was carried out. The table-1 represents the data about the significance of differences in the mean scores on the teaching aptitude of the total Sample.

Table 1: Test of Significance of difference between means of Teaching Aptitude based on individualised instruction for the Total Sample

Variable	Category	N	Mean	SD	CR	Level Of Significance
Pre Test	Students Teachers at	33	11.8542	8.5788	9.04	0.01
Post Test	Primary Level		21.5208	6.1436		P<0.01

Fig 1: Graphical Representation of the teaching aptitude of individualised instruction for the Total Sample

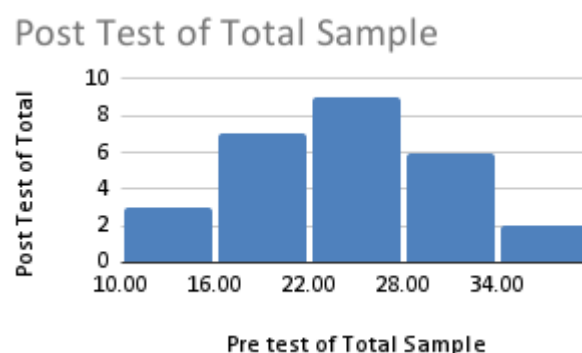


Table 2 Test of Significance of difference between means of the teaching aptitude of individualised instruction based on Sub sample Graduate of Pre-test and Post Test Data

Variable	Category	N	Mean	SD	CR	Level Of Significance
Graduate	Pre test	20	11.7778	4.2779	5.22	0.01
	Post test		21.4444	6.5907		P<0.01

Fig 2.1: Graphical Representation of the teaching aptitude of individualised instruction based on Sub sample Graduates of Pre-test and Post Test Data

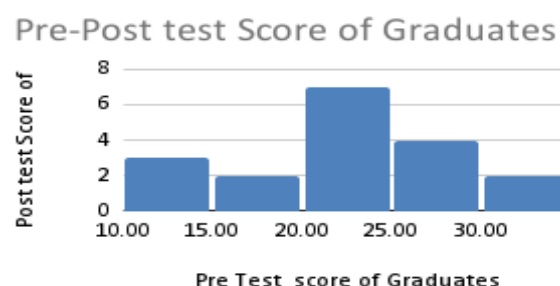


Table 3: Test of Significance of difference between means of the teaching aptitude of individualised instruction based on Sub sample Post Graduate of Pre-test and Post Test Data

Variable	Category	N	Mean	SD	CR	Level Of Significance
Post Grad-uate	Pre test	13	14.5556	4.5856	5.27	0.01
	Post test		27.8889	6.0507		P<0.01

Fig 2.2 : Graphical Representation of the teaching aptitude of individualised instruction based on Sub sample Post Graduate of Pre test and Post Test Data

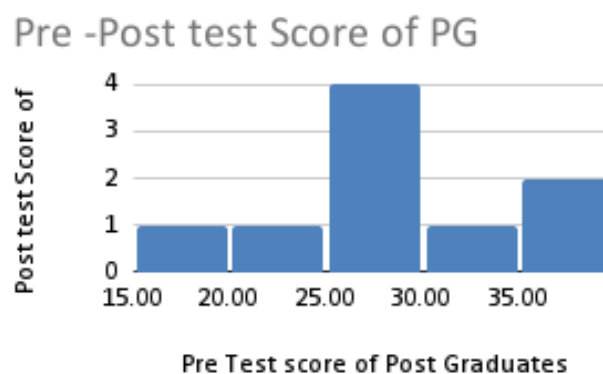


Table 4: Test of Significance of difference between means of the teaching aptitude of individualised instructions on Pre-test based on Sub Sample Qualification

Variable	Category	N	Mean	SD	CR	Level Of Significance
Pre Test	Graduate	20	11.7778	4.2779	1.55	Not Significant
	Post Graduate	13	14.5556	4.5856		

Fig 3.1: Graphical Representation of the teaching aptitude of individualised instruction on Pre-test based on Sub Sample Qualification

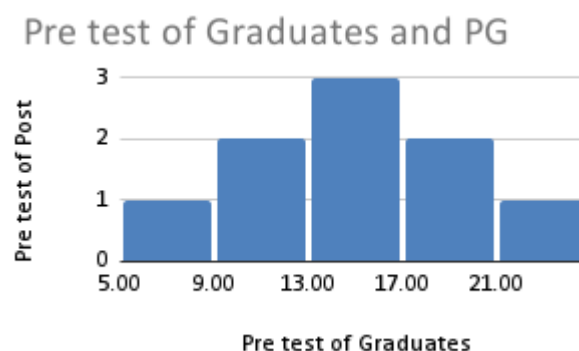
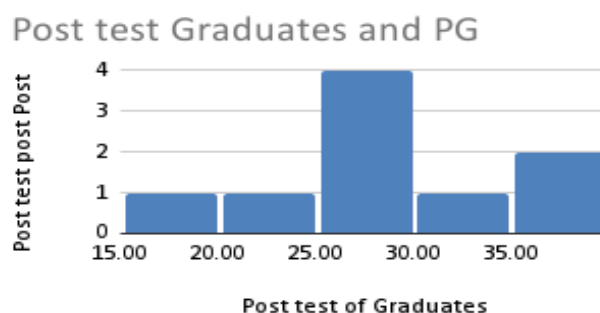


Table 5: Test of Significance of difference between means of the teaching aptitude of individualised instruction on Post-test based on Sub Sample Qualification

Variable	Category	N	Mean	SD	CR	Level Of Significance
Post Test	Graduate	20	21.4444	6.5907	2.46	0.05
	Post Graduate	13	27.8889	6.0507		P<0.01

Fig 3.2: Graphical Representation of the teaching aptitude of individualised instruction on Post-test based on Sub Sample Qualification



It is found from Table 1 that the absolute 't' value is greater than 1.96 and 2.58. It is found that there is a significant level of difference in pre-test and post-test scores based on the individualised instruction for the total Sample. Table 2 shows that there is a significant difference in pre-test and post-test scores in Aptitude Testing. Table 3 shows that there is no significant difference between pre-test scores and is only a 5% level of significance between the Post-test score of Degree and PG holders. So accept Hypothesis H01 and it is concluded that the Teaching Aptitude score of Student Teachers at the Primary level for individualised Instruction differ significantly between Pre-test and Post-test data.

Teaching Aptitude scores of Student Teachers at the Primary level for individualised Instruction differ significantly between Pre-test and Post-test data. For Sub sample Post Graduate and Graduate student teachers at the Primary level have a very slight difference in their aptitude based on individualised instruction towards teaching

MAJOR FINDINGS

After the careful analysis of the obtained data and interpretation of the results about the objectives and hypotheses of the study, the investigator reached the following findings:

- Individualised instruction is very effective for enhancing the Aptitude of students at the Primary Student Teacher's level.
- Based on pre-test scores learning capacity is almost at the same level for all sub-samples.

- PG holders have very slight aptitude variation to provide individualised instruction other than graduates

EDUCATIONAL IMPLICATIONS

From the above study, it is clear that Teaching Aptitude is very much crucial for the selection of a teacher trainee. In the Modern Era, knowledge and information are readily available, but the processing of their information according to their learning style is a matter of interest. Since individual difference is very much predominant in the present society, teachers should have

the aptitude for individualized instruction, which always enhances learning

CONCLUSION

In the transition from the Teacher to the Facilitator, future teachers must have the ability to give individualised instruction. The level of qualification is having less effect on Aptitude. The overall study makes it clear that the teaching aptitude of teacher trainees is of great importance and significance. Higher Qualification holders can show higher Teaching Aptitude because of their experience. A teacher with high Aptitude provides everlasting impact on the students, which will help them to bloom into their highest potential.

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