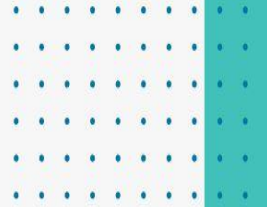


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TEACHING AND LEARNING IN HIGHER EDUCATION

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PREFACE

The author is grateful to the readers for the warm reception accorded to this book which is primarily designed to meet the needs of stakeholders in higher education students of various universities. In an era characterized by rapid technological advancements and shifting societal needs, the landscape of higher education has transformed in profound ways. "Teaching and Learning in Higher Education" aims to explore these transformations, delving deeply into the methodologies, theories, and practices that shape the educational experiences of students and educators alike. Each chapter presents research-based insights, practical strategies, and reflective practices designed to enhance teaching effectiveness and promote student engagement. Topics range from the impact of digital tools on learning to the importance of fostering inclusive classroom environments, all while emphasizing a student-centered approach. As we embark on this exploration, we invite readers - educators, administrators, policy makers, and students - to engage with the content critically and reflectively. The goal of this book is not merely to present theories and methodologies but to inspire dialogue and collaboration among all stakeholders in higher education. In a world where knowledge is constantly evolving, the role of higher education remains pivotal. It is my hope that "Teaching and Learning in Higher Education" serves as a valuable resource for those committed to nurturing the next generation of thinkers and leaders.

The author extends his grateful thanks to all the authors and publishers whose books he has studied and quoted in the preparation of this volume. Suggestions for further improvement of the book will be highly appreciated. With gratitude,

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21.10.2024

ISBN NO: 9798303893870

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Students Attitude towards Technology Integration in Modern Education

Abstract

It is also important to ensure that students have access to the necessary resources, such as technology and technical support, to help them feel comfortable and confident when using technology. Additionally, educators should strive to create a culture of collaboration and support that encourages students to use technology in an effective way. Objectives of the study are to study the attitude difference between male and female students regarding modern learning reflection, to study the class wise attitude difference among different level of students towards technological advancement in modern learning. The hypothesis of the study are-there is no significant difference between male and female students' attitude regarding modern learning reflection, there is no significant class wise attitude difference among different level of students towards technological advancement in modern learning reflection. Questionnaire with 20 questions and five point scale has applied for the data collection. This study found that female students' attitude regarding modern learning reflection is high than male students' group attitude. There is no significant difference between male and female student's attitude regarding modern learning reflection. There is no significant difference in attitude among different schools' students towards technological advancement in modern learning. There have attitude difference among students in different schools towards technological advancement in modern learning .There have Kurtosisvalue difference shows among schools, so there have attitude difference among students in different schools towards technological advancement in modern learning.

Keywords: Technological advancement, technology in education, learning reflection.

ISBN NO: 9798303893870

1.0. Introduction

Technology integration is defined as the use of technology to enhance and support the educational environment. Technology integration in the classroom can also support classroom instruction by creating opportunities for students to complete assignments on the computer rather than with a normal pencil and paper. Technology integration can also help teachers create interactive learning activities and assessments, as well as provide students with instant access to resources and data. In addition, technology integration can help teachers to track student progress and identify areas of improvement. Technology integration can also help teachers to create more meaningful and engaging learning experiences for students.

The twenty-first century is frequently seen as a technological period. Today, technology is extremely vital in our lives. It is seen as the bedrock upon which an economy's progress is built. In present era, an enterprise that is not technologically advanced would never grow. This is because technology has made our work significantly easier and less time consuming. Technology has an impact on every sector, one of which is education. Education has been for a century or more, one of the areas which has walled itself & on technological advances and consequently has created a technological vacuum (Halls and Kemper, 1962). According to the National Policy on Education (1986), modern educational technology may be employed in the spread of useful information, the training and retraining of teachers, to improve quality, share awareness of art and culture, inculcate abiding values etc. both in the formal and non- formal sectors. Maximum use will be made of the available infrastructure. While pointing out the media and technology, the Policy highlights the significance of technology in the field of education. The induction of

ISBN NO: 9798303893870

technology in different professions has accounted for increased productivity, improved quality and positive directions for the problem-solving through research in educational organizations. Educational technology has emerged in the educational scenario as an instrument of total quality education as well as effective means of solving education-related problems in India, like low enrolment and high dropout, poor performance, low level cognition and lack of problem-solving skills etc. Technology can be used to automate administrative tasks, provide access to educational resources, and increase the effectiveness of teaching and learning. It can also help to bridge the digital divide and create more inclusive learning environments.

Student attitudes toward modern learning methods vary. Some embrace technology and online resources, finding them engaging and convenient. Others may prefer traditional approaches, valuing face-to-face interaction. Overall, attitudes are influenced by factors like personal learning style, access to technology, and the effectiveness of modern methods in meeting educational needs. From the student's point of view, e-learning is a form of education which implies involvement, motivation and efficiency in communication. The lack of human interaction strongly influences his performance in education. Therefore, it is important for educators to understand the needs of their students and provide the necessary support to ensure their success. The student must communicate frequently with his colleagues and teachers so as to be able to accomplish all assignments; he has to find internal resources as a stimulus to overpass the difficulties of a socially isolated environment. The impact of e-learning development and its introduction as an educational system can be assessed in the light of students' characteristics. Thus, we speak primarily of a separation of "serious" students from the "passive" ones. The first category are those who

will use online resources to develop their knowledge, taking advantage of the benefits of e-learning, while the "passives" will take advantage of the benefits of new educational establishments to obtain diplomas that might help them to get a better job. The successful e-learner must have, according to a study conducted at Bloomsburg University of Pennsylvania, qualities such as self-motivation, patience, self-discipline, easiness in using software, good technical skills abilities regarding time management, communication, organizing. Of these the largest share was registered by self-motivation - 39% and communications skills - 23%. Other studies have found records that experience in computer use are another success factor in in adopting e-learning. Reflection is a process that involves thinking about what you're learning and how you're learning it. It's a complex, intellectual, and emotional process that takes time to do well. For example, through reflection, students could identify the areas that were not clear, look for the best strategies of completing their tasks, and identify they were neglected by students. Students also improved the cohesiveness and the overall quality of their work. Here in this process students can identify the problem and express feelings towards it. After these students can evaluate the problem and identify its characteristics. On this evaluation he can make an analysis of the problem and be aware of what is the nature of the problem. Based on the analysis he got a conclusion that what is do you have done or what is the cause of the problem. And at last based on the make an action plan to cure the problem and enhance the learning process.

Literature Review

Mitchell et al. (2007) conducted an exploratory study on web-enhanced learning in undergraduate nurse education. They found that students held favorable attitude towards Web-enhanced learning in undergraduate nurse education, but some students experienced difficulties.

Van Daal et al. (2000) Reported dramatic increase in reading and spelling performance of kinder garden students (K2) who were exposed to a computer based reading and spelling performance compared to those who were not exposed to computerized program.

Siman et al. (2001) studied the usage of technology as a replacement for rather than a supplement to a traditional text book and found that the technology was more useful than traditional media.

Warnet et al. (2000) surveyed students who used web CT in social work course. They found that all of the respondents considered online course materials beneficial to their overall learning experience.

Selwyn and Neil. (2016) In his seminal work, "Is Technology Good for Education?," Selwyn critically examines the assumptions underpinning the integration of technology in education. He explores how students perceive the benefits and drawbacks of technological advancements and highlights the importance of considering diverse perspectives in shaping effective educational technology policies.

Barbara et al. (2013) conducted research by Means and her colleagues in "Using Technology to Support At-Risk Students' Learning" focuses on the impact of technology on at-risk students. The study investigates how technological tools influence student engagement, motivation, and learning outcomes, providing insights into the nuanced relationship between technology and academic success.

Kvavik and Robert (2005) Kvavik's work, "Convenience, Communications, and Control: How Students Use Technology," ISBN NO: 9798303893870

delves into the ways students incorporate technology into their learning routines. By examining students' habits and preferences, Kvavik provides valuable insights into the role of technology as a tool for convenience, communication, and control in modern learning environments.

Hartshorne et al. (2018) in "Effects of Gamification on Student Motivation," Hartshorne and his team explore the impact of gamification on student motivation and engagement. The study provides insights into how technological gamification elements can influence students' attitudes and participation in educational activities.

Smith et al. (2017) the impact of technology on student learning attitudes. Smith's study delves into the evolving landscape of education due to technological advancements. The research explores how students perceive and engage with modern learning technologies, shedding light on the positive and negative aspects of these tools in shaping attitudes.

Kay (2006) evaluating strategies used to incorporate technology into Pre-service Education: A Review of the Literature. *Journal of Research on Technology in Education*, 38(4), 383-408.

Aims and Objectives

Aims

Aims of the study are to identify the modern technological learning reflection of school students.

Objectives

- To study the attitude difference between male and female students toward Technology Integration in Modern Education.
- To study the class wise attitude difference among different level of students towards Technology Integration in Modern Education.

Hypothesis

H0₁: There is no significant difference between male and female students' attitude towards Technology Integration in Modern Education.

H0₂: There is no significant difference in attitude among different schools' students towards Technology Integration in Modern Education.

2.0. Methods

Two self-made standardized questionnaire with 20 questions (in each) is constructed and applied for data collection. The questionnaires are constructed with 5 point scale. 200 samples are selected from different regions of West Bengal. The samples are male and female. Simple random sampling method is applied for data collection. Descriptive and inferential statistics are applied for data analysis.

Table -1: Data table design

Gender	School 1	School 2	School 3	School 4
Male	25 students	25 students	25 students	25 students
Female	25 students	25 students	25 students	25 students

3.0. Findings and Discussion

Objective-1: To study the attitude difference between male and female students toward Technology Integration in Modern Education.

H0₁: There is no significant difference between male and female students' attitude toward Technology Integration in Modern Education.

Table -2: Group Statistics Mean Difference

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
AttitudeMLR	Male	200	37.7850	6.47522	.45787
	Female	200	39.1850	5.54658	.39220

According to the table -2, it is clearly shown that number of samples 200 in each group, male group mean 37.79 & 39.2 is female group mean, so females students' attitude regarding modern learning reflection is high than male students' group attitude.

Table -3: Independent Samples Test (t-test for Equality of Means)

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Attitude MLR	Equal variances assumed	2.642	.105	-2.322	398
	Equal variances not assumed			-2.322	388.829

The above table shows that equal variances assumed group t-value is -2.322 & significant value 0.105 which is above 0.05 & 0.01. So, the null hypothesis is not rejected. Also, there is no significant difference between male and female students' attitude regarding modern learning reflection.

Table -4: Independent Samples Test

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
Attitude MLR	Equal variances assumed	.021	-1.40000	.60288
	Equal variances not assumed	.021	-1.40000	.60288

The above table shows that equal variances assumed group t-value is .21 & mean difference is -1.40000, and standard error is .60288. In the other side equal variances not assumed group t-value, mean difference and standard error is equal. Also, there is no significant difference between male and female students' attitude regarding modern learning reflection.

Objective-2: To study the attitude difference among different school of students toward Technology Integration in Modern Education.

H0₂: There is no significant difference in attitude among different schools' students toward Technology Integration in Modern Education.

Table-5: Tests of Homogeneity of Variances among different school of students towards technological advancement in modern learning.

Tests of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Students	Based on Mean	1.593	28	365	.031
	Based on Median	.915	28	365	.593
	Based on Median and with adjusted df	.915	28	274.371	.593
	Based on trimmed mean	1.563	28	365	.037

Table-6: ANOVA of attitude difference among different school of students towards technological advancement in modern learning.

ANOVA					
Students					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	49.022	34	1.442	1.167	.245
Within Groups	450.978	365	1.236		
Total	500.000	399			

The above table shows that the attitude difference among different school of students towards technological advancement in modern learning. Here Sum of Squares between groups 49.022, df-34, Mean Square 1.442, F-value 1.167 & Significant Value is 0.245 which is above 0.05 & 0.01 level of significance. So, the null hypothesis is unable to reject and the hypothesis is true i.e. there is no significant difference in attitude among different schools' students towards technological advancement in modern learning.

Table-7: - ANOVA Effect Sizes different school of students towards technological advancement in modern learning

ANOVA Effect Sizes				
		Point Estimate	95% Confidence Interval	
			Lower	Upper
Students	Eta-squared	.098	.000	.072
	Epsilon-squared	.014	-.093	-.015
	Omega-squared Fixed-effect	.014	-.093	-.015
	Omega-squared Random-effect	.000	-.003	.000
a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.				
b. Negative but less biased estimates are retained, not rounded to zero.				

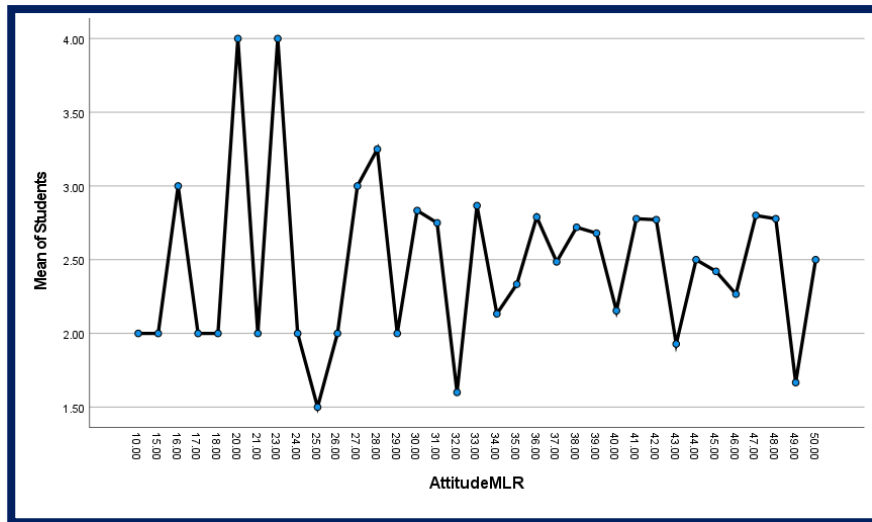


Fig. 1:- Attitude in different school of students towards technological advancement in modern learning.

Figure No. 1 demonstrates that two students have positive and high attitudes toward technological integration in modern education, while three students have negative attitudes.

Table no - 8: Descriptive Statistics of four Schools

<i>School-1</i>		<i>School-1</i>		<i>School-1</i>		<i>School-1</i>	
Mean	52.9 2708 333	Mean	38.65 625	Mean	39.62 5	Mean	37.95 833
Standard Error	14.8 8130 483	Standard Error	0.731 631	Standard Error	0.738 44	Standard Error	0.512 672
Median	37.8 75	Median	38.87 5	Median	39.12 5	Median	37.87 5
Mode	36.2 5	Mode	39.5	Mode	36.75	Mode	37.25
Standard Deviation	72.9 0320 709	Standard Deviation	3.584 244	Standard Deviation	3.617 59	Standard Deviation	2.511 567
Sample Variance	5314 .877 604	Sample Variance	12.84 681	Sample Variance	13.08 7	Sample Variance	6.307 971
Kurtosis	23.9 3722 675	Kurtosis	1.408 763	Kurtosis	- 0.794 7	Kurtosis	- 0.318 211
Skewness	4.88 9765 925	Skewness	0.397 3	Skewness	- 0.106 9	Skewness	- 0.143 48
Range	361. 25	Range	16.5	Range	12.5	Range	9.75
Minimum	33.7 5	Minimum	32	Minimum	32.75	Minimum	32.5
Maximum	395	Maximum	48.5	Maximum	45.25	Maximum	42.25
Sum	1270 .25	Sum	927.7 5	Sum	951	Sum	911
Count	24	Count	24	Count	24	Count	24

Table no-8 shows the descriptive statistics among four schools, means of the four schools are (52.92708333, 38.65625, 39.625, 37.95833). Among the four schools mean indicated that school 1 mean score is high then the other three schools mean scores. There have mean difference shows among schools, So there have attitude difference among students in different schools towards technological advancement in modern learning.

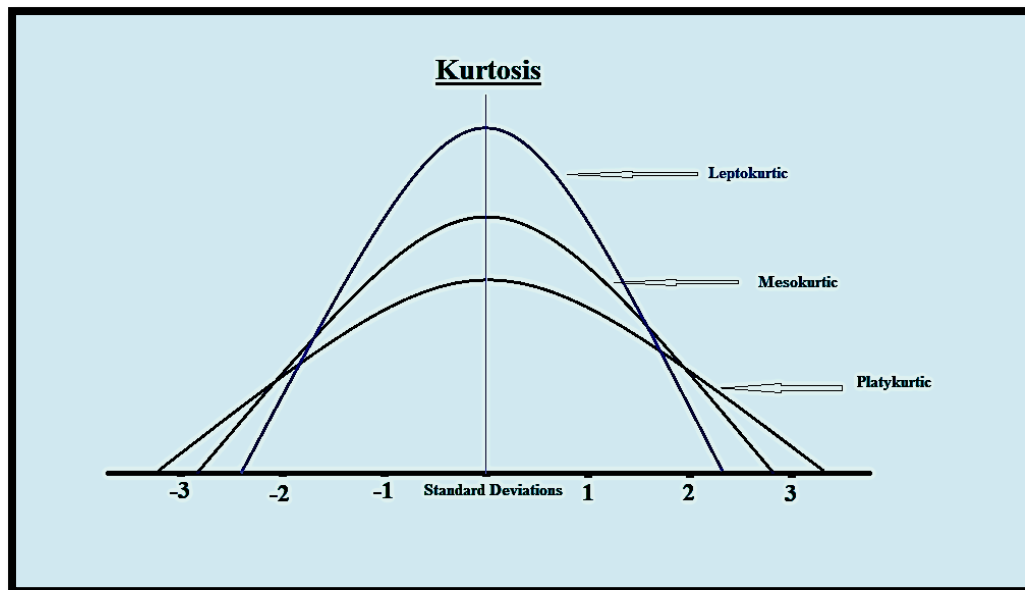


Fig. 2: Attitude in different school of students towards technological advancement in modern learning.

Kurtosis is a statistical measure that describes the shape of a distribution's tails in relation to its overall shape. Specifically, it indicates whether the data are heavy-tailed or light-tailed relative to a normal distribution. There are three main types:

1. **Leptokurtic:** Leptokurtic distributions are characterized by positive kurtosis, meaning they have a sharper peak and heavier tails compared to a normal distribution. This indicates a higher likelihood of extreme values or outliers.
2. **Platykurtic:** Platykurtic distributions have negative kurtosis, meaning they have a flatter peak and lighter tails compared to a normal distribution. This suggests fewer extreme values.
3. **Mesocratic:** Mesocratic distributions have kurtosis equal to 3, resembling the normal distribution. This means they have a similar peak and tails to a normal distribution.

Figure No. 2 demonstrates that the descriptive statistics among four schools, Skewness level of the four schools are (4.889765925, 0.3973, -0.1069, -0.14348). Among the four schools Skewness level indicated that school Skewness score is high then the other three schools Skewness scores. There have mean difference shows among schools, So there have attitude difference among students in different schools towards technological advancement in modern learning.

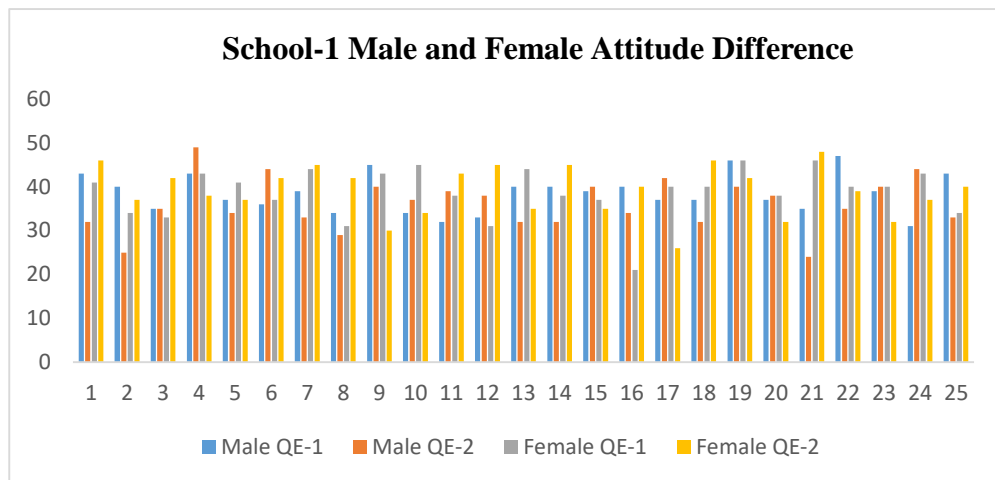


Fig.3: School 1 male and female attitude

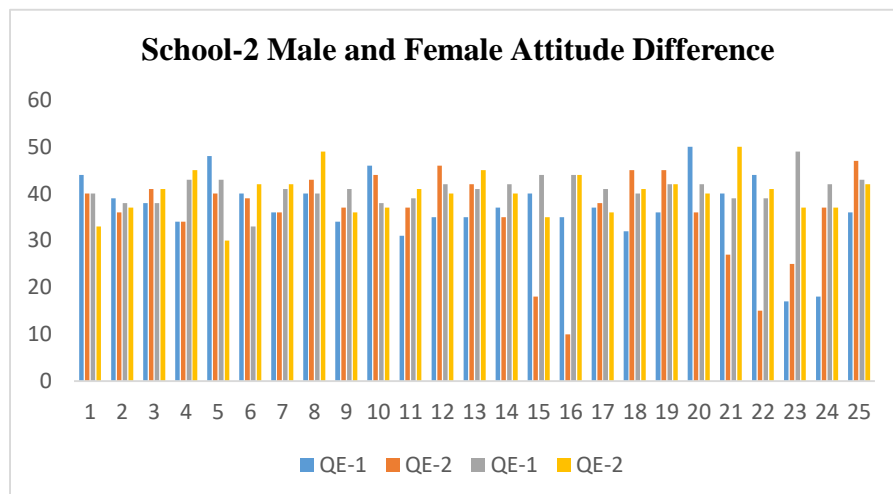


Fig-4: School 2 male and female attitude

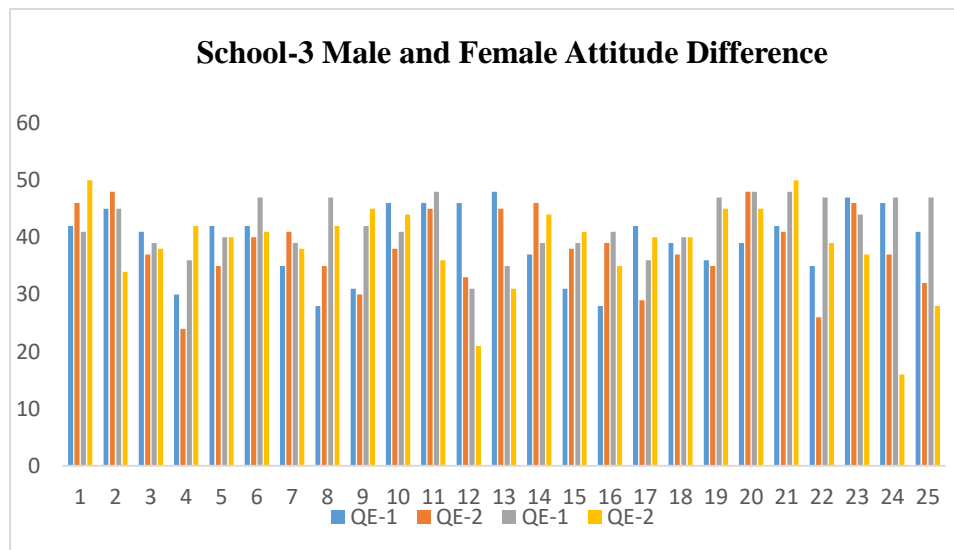


Fig.5: School 3 male and female attitude

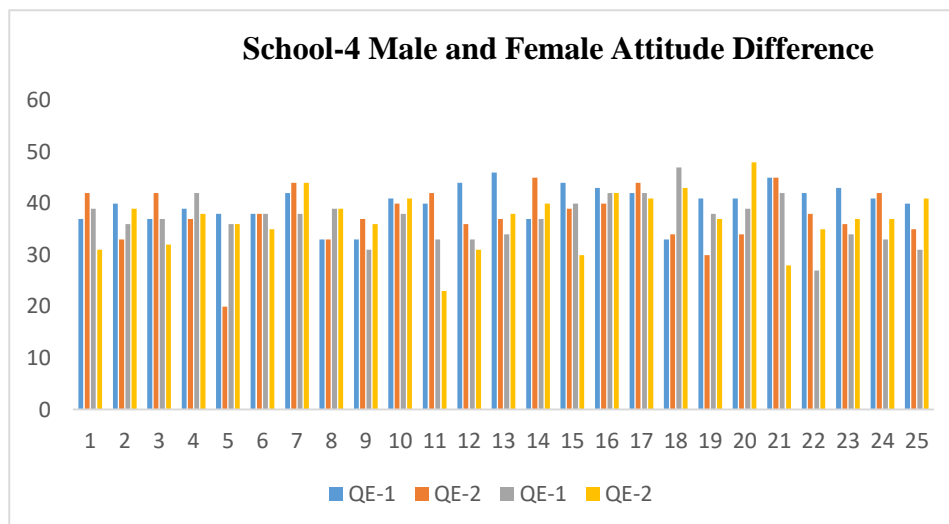


Fig.6: School 4 male and female attitude

4.0. Conclusions

In conclusion, the evolving attitudes of students towards technological advancement and modern learning reflect a profound shift in education paradigms. Embracing technology has empowered students with personalized learning experiences, enhanced collaboration opportunities, and greater flexibility in their educational journey. As digital literacy becomes increasingly integral to their skill set, students are not only preparing for future careers but also developing critical thinking and problem-solving abilities essential for navigating a rapidly changing world. This study found that female students' attitude regarding modern learning reflection is high than male students' group attitude. There is no significant difference between male and female student's attitude regarding modern learning reflection. There is no significant difference in attitude among different schools' students towards technological advancement in modern learning. There have attitude difference among students in different schools towards technological advancement in modern learning. There have Kurtosisvalue difference shows among schools, so there have attitude difference among students in different schools towards technological advancement in modern learning. However, alongside these benefits come responsibilities, such as ethical considerations and the need for lifelong learning. By harnessing the potential of technology responsibly, students are poised to contribute meaningfully to society and thrive in a globalized, knowledge-based economy. Thus, their positive embrace of technological advancement underscores its pivotal role in shaping the future of education and individual success.

Future Scope

The future scope of students' attitudes towards technological advancement in modern learning reflects a significant shift in education. Here are some key points to consider for future study:

- ❖ Students are increasingly embracing technology as an integral part of their learning experience. This trend is likely to continue as educational institutions worldwide adopt digital tools, online platforms, and interactive resources to enhance learning outcomes.
- ❖ Technology enables personalized learning experiences tailored to individual student needs and preferences. This includes adaptive learning software, AI-driven tutoring systems, and data analytics to track student progress and provide targeted interventions.
- ❖ Modern learning technologies offer flexibility in terms of when, where, and how students learn. This accessibility is crucial for accommodating diverse learning styles and schedules, including remote and hybrid learning models.
- ❖ Digital tools facilitate collaboration among students and with educators globally. Virtual classrooms, online forums, and collaborative platforms encourage teamwork, peer-to-peer learning, and cultural exchange beyond geographical boundaries.
- ❖ There is an increasing emphasis on developing digital literacy and 21st-century skills such as critical thinking, problem-solving, and creativity. Students are encouraged to explore new technologies and apply them to real-world challenges.
- ❖ As technology evolves, students need to navigate ethical issues such as data privacy, cyber security, and responsible

use of social media. Educators play a crucial role in promoting digital citizenship and ethical behaviour online.

- ❖ Continuous learning is increasingly seen as essential for career success and personal growth. Students are encouraged to adopt a mind-set of lifelong learning, leveraging technology to stay updated with emerging trends and developments.

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Influence of Study Habits on Academic Performance among Secondary School Students

Abstract

Study habits are the techniques and actions students use to gain new knowledge, enhance their academic results, and get ready for tests or studying academic material. These routines consist of factors like knowledge, abilities, hard work, commitment, self-control, and drive. A student's academic success hinges on their study habits. Main objectives of this study was to study the relation between study habit and academic performance in secondary school students of Paschim Medinipur districts. For data analysis using Mean, SD, t-test and Correlation techniques. The Descriptive-correlation research method was utilized to describe the respondents' profile in terms of their study attitudes, study habits, and academic performance. The study was found that the coefficient of correlation between study habit and academic performance in secondary school students is positive and high. So highly attend student can achieve high scoring academic filed, mean difference between boy and girl students in reference to habit pattern is not significant, the study was found that mean difference between boy and girl students in reference to habit pattern is not significant and also the study found that the no significant relation between academic performance and habit pattern in reference to the elementary and secondary level.

Key Words: Study habit, Academic performance.

1.0. Introduction

Study habits are the techniques and actions students use to gain new knowledge, enhance their academic results, and get ready for tests or studying academic material. These routines consist of factors like knowledge, abilities, hard work, commitment, self-control, and drive. A student's academic success hinges on their study habits. Students often engage in activities such as reading, note-taking, and participating in study groups in order to consistently achieve their learning objectives. Its effectiveness or lack thereof depends on how well it benefits the students. Ashish (2013) opines that if students must ensure academic success throughout the entire year, it is important to ditch bad study habits and establish good ones. He further maintains that no matter what age or academic level, employing effective study strategies can make all the difference between acing a class, barely passing or worse and failing miserably. She admits that many of today's most common study methods or habits can lead to utter disappointment despite best efforts and intentions. Adeninyi (2011) maintains that good study habits allows students to study independently at home and aspire for higher educational career. The formation of good study habits in secondary school level further serves as the basis for students' performance in external examinations such as West African Examinations Council (WAEC), National Examinations Council (NECO) and Joint Admissions and Matriculation Board (JAMB). Katelyn (2013), there is no doubt that different people study in different ways and it is a near certainty that what works for one person may not work for another.

Chaplin (1959) defines educational or Academic performance as specified level of attainment or proficiency in academic work as evaluated by the teachers, by standardized tests or by a combination

ISBN NO: 9798303893870

of both. Bhatnagar R, P. (1969) considers Academic performance or Academic Performance of students as an aspect of their total behaviour. It is the product of the interaction of the student, as an individual with his environment, namely school, teachers and peers. Symons (1960) he reports that marks earned in the examination make a tremendous difference to a student. Gupta and Kapoor (1969) have stated that Academic performance or Academic Performance like performance in other fields is not one-dimensional, but it is a multidimensional activity, involving a number of phases. To study habits is the tendency of a student to study, whether it is systematic or unsystematic, efficient or inefficient and implies a sort of more or less permanent method of studying.

Its measurement is done by individual scores on each dimension regarding study i.e. comprehension, concentration, task -orientation, interaction, drilling, supports, recording and total scores on Study Habit Inventory by Mukhopadhyaya and Sansanwal (2002). Sharma (1971) compared the study habit of 65 Gurukula and 65 non-Gurukula students. The difference between study habits of Gurukula and non-Gurukula students were not significant at any level of significance. Chinna (1985) conducted a study on 'study habits' in relation to over and under achievement in English. It was concluded that over-achievers in English had significantly better study habits as compared to under-achievers in the same subject.

"Achievement" is explained as: (1) victory, establishment; (2) cultivation; (3) the result of a career. Academic performance is defined as: (1) learned effort; (2) schoolwork. Achievement is defined as: the result obtained through study. The English translations of academic performance are related to "academic learning", "educational attainment", etc. Academic simply refers to the performance of learning that is ultimately achieved through teaching,

development and learning, which is obtained through achievement tests.

Academic is explained as "academic work, school work" (Pandey et al., 1996). The term "academic work" refers to the results achieved by students as a result of the accumulation of learning, while "school work" refers to the learning tasks set by the school and is characterized by stages. Achievement refers to the completion and attainment of a certain level that a student can achieve after a series of education or training, while performance refers to the result of an examination in a subject or a whole course (Lamas, 2015). However, some scholars consider achievement to be equivalent to grades, and it is on the basis of the different understandings of achievement and grades that scholars have differed in their definitions of academic performance (Brookhart et al., 2016).

The term "academic" can be expressed as the result of school work, such as academic

Academic performance contains cognitive, behavioral, and psychological connotations, and Astin (1974) argued that academic performance can be divided into two aspects: namely, cognitive and non-cognitive outcomes; and psychological and behavioral outcomes. Pascarella (1991) and other scholars argued that in addition to cognitive ability, academic performance also includes psychological factors such as intelligence, psychological change, perseverance. Bloom (1956) believes that it can be divided into the following areas: knowledge, attitudes, values, skills, or appropriate behavior.

Aims, Objectives and Hypothesis

Aim

The study want to point out the relation between study habit and academic performance in secondary school students of Paschim Medinipur districts.

Objectives

- To study the relation between study habit and academic performance in secondary school of Paschim Medinipur district.
- To study the difference between male and female students in study habit with academic performance in secondary school of Paschim Medinipur district.
- To study the difference between elementary and secondary level students in study habit with academic performance in secondary school of Paschim Medinipur district.

Hypothesis

H01: There is no significant difference between male and female students in study habit with academic performance in secondary school of Paschim Medinipur district.

H02: There is no significant difference between elementary and secondary level students in study habit with academic performance in secondary school of Paschim Medinipur district.

2.0 Methods

A population is a complete set of people with a specialized set of characteristics. Population of the present study higher secondary Bengali medium schools students of Paschim Medinipur district in West Bengal. A sample is a subset of individuals from a larger population.

The sample consists of 200 (male and female) higher secondary school students (Elementary & Secondary) from five Bengali medium schools in Paschim Medinipur district of West Bengal are selected. Sampling means selecting the group where actually collect data from research.

Purposive sampling method used for data collection from different schools. Researcher self-developed study Habits Inventory and Achievement Test were used for data collection.

Three self-made questionnaire comprised with five point (strongly agree, agree, neutral, disagree, strongly disagree) scale with 20 questions in 20 question in (Habit Inventory) and 20 questions in (academic performance) were constructed and standardized by expert rating for this study. Also, researchers took a pilot study to check the usability of the tool. Each tools' reliability, validity were checked with test re-test method and satisfactory result was came out. The study's primary purpose was to determine the relationship between study habits and the students' academic performance. Study habit Inventory' and achievement test were used for data analysis using Mean, SD, t-test and Correlation techniques. The Descriptive-correlation research method was utilized to describe the respondents' profile in terms of their study attitudes, study habits, and academic performance.

Table No. 1: Sample

Schools	School - 1		School - 2		School - 3		School - 4		School - 5		Total
Male	10	10	10	10	10	10	10	10	10	10	100
Female	10	10	10	10	10	10	10	10	10	10	100

3.0. Result

The data analyzed by descriptive statistics, graphical presentation and the difference between two variables calculated by t-test.

So, after the analyzing the data the study was found some significant relation and differences among students.

According to the first objectives of this study ‘to identify the relation between study habit and academic performance in secondary school students’ and respected hypothesis is ‘there is no significant relation between study habit and academic performance in secondary school students.

Table No. 2: Correlation study habit and academic performance in secondary school students in Paschim Medinipur district

	Male	Female
Column 1	1	
Column 2	0.967457953	1

There has significant relation between study habit and academic performance among students, the coefficient of correlation value is 0.967457953, relation is positive. So, we can conclude that there was relation between study habit and academic performance in secondary school students.

According to the first objectives of this study to study the relation between study habit and academic performance in secondary school students.

Based on first objectives the study found that there was a significant relation between study habit and academic performance among the students of second school. So, we can say that there have an impact of study habit in academic performance.

According to the second objectives of this study to study the difference between male and female students in study habit with academic performance in secondary school of Paschim Medinipur district and the corresponding null hypothesis is there is no significant difference between boy and girl students in academic performance in reference to study habit.

Table No. 3: Independent Samples Test (t-test for Equality of Means) male and female students in academic performance.

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Study Habit	Equal variances assumed	2.642	.105	-2.322	398
	Equal variances not assumed			-2.322	388.829

The above table value shows that equal variances assumed group t-value is -2.322 & significant value 0.105 which is above 0.05 & 0.01. So, the null hypothesis is not rejected. Also, there is no significant difference between male and female students' in academic performance in reference to and habit pattern.

According to the second objectives of this study to study the difference between elementary and secondary level students in study habit with academic performance in secondary school of Paschim Medinipur district. The corresponding null hypothesis is there is no significant difference between elementary and secondary level students in study habit with academic performance in secondary school of Paschim Medinipur district.

Table -4: Independent Samples Test regarding significant difference between elementary and secondary level students.

Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Study Habit	Equal variances assumed	2.642	.103	-1.322	398
	Equal variances not assumed			-.522	388.829

The above table (Tab- 8) value shows that equal variances assumed group t-value is -1.322 & significant value 0.103 which is above 0.05 & 0.01. so, the null hypothesis is not rejected. Also, there is no significant difference between male and female students' in academic performance in reference to and habit pattern.

Table No. 5: Descriptive analysis of male and female scores

	M	F
Mean	55.22352941	56.47058824
Standard Error	1.173698091	1.403024342
Median	62	52.5
Mode	40	39
Standard Deviation	15.30315083	18.29319933
Sample Variance	234.1864253	334.6411417
Kurtosis	- 1.672875063	- 1.398085698
Skewness	- 0.074866297	0.241807084

From the above table (table- 9) we find the mean, median, SD, kurtosis and skewness.

Mean is the average of the given numbers and is calculated by dividing the sum of given numbers by the total number of numbers.

We find that mean between male (M- 55.224) and female (M- 56.5) are not equal. So there have a difference between male and female mean score.

The median is the middle number in a sorted, ascending or descending list of numbers and can be more descriptive of that data set than the average. It is the point above and below which half (50%) the observed data falls, and so represents the midpoint of the data.

We find that median between male (ME- 62) and female (ME- 52.5) are higher than female. It's mean that male average score is high than

female. We are also find that male metacognitive skill is better than female.

- 1) The median is the exact mid-point of series bellow and above which 50 % of cases lie. Therefore, when the exact mid-point of distribution is desired. Median is to be computed.
- 2) The median is not affected by the extreme scores in the series. Therefore, when a series contains, extreme scores the median is perhaps the most representative central measure.
- 3) In the case of open-end distribution, it is possible to calculate the mean and hence, the median is most reliable measure that can be computed.

A standard deviation (or σ) is a measure of how dispersed the data is in relation to the mean. Low standard deviation means data are clustered around the mean, and high standard deviation indicates data are more spread out.

We find that standard deviation between male (SD- 15.303) and female (SD- 18.293) are higher than male. It's mean that male SD is normal than female.

- 1) we need a most reliable measure of variability.
- 2) There is a need of computation o of the correlation coefficients, significant of difference between means and like.

Skewness is a measurement of the distortion of symmetrical distribution or asymmetry in a data set. Skewness is demonstrated on a bell curve when data points are not distributed

Symmetrically to the left and right sides of the median on a bell curve. If the bell curve is shifted to the left or the right, it is said to be skewed.

We find that skewness between male (SK- -0.075) female (SK- 0.242). It's mean that male mean is bend towards left side and female mean is bent towards right side.

Kurtosis is a measure of the tailedness of a distribution. Tailedness is how often outliers occur. Excess kurtosis is the tailedness of a distribution relative to a normal distribution. Distributions with medium kurtosis (medium tails) are mesocratic.

We find that kurtosis between male (K- -1.673) and female (K- -1.399) are not normal. It's mean it is bellow more than normal. It's called platykurtic.

The skewness and the kurtosis Skewness and Kurtosis are used to describe the spread and height of your normal distribution. Skewness is used to denote the horizontal pull on the data. It tells you how spread out the data is, and Kurtosis is used to find the vertical pull or the peak's height.

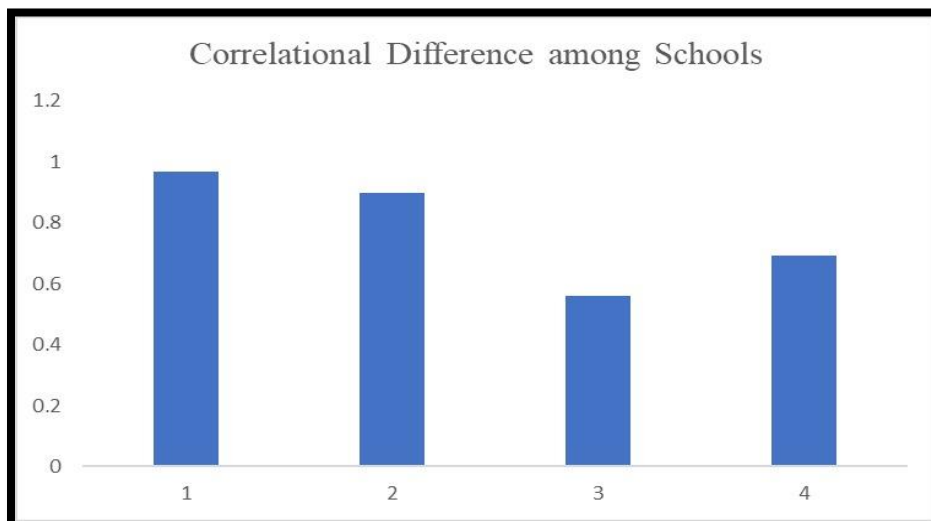


Figure- 1: Graphical presentation of Correlational Difference among schools

From the above graph, we find that correlational value of 1st school (0.9675) is higher than all other school. Correlational value of 2nd

school (0.8989) is lower than 1st school and higher than other two school. Correlational value of 3rd school (0.556) is lower than all other school. Correlational value of 4th school (0.6923) is higher than 3rd school and lower than other two school.

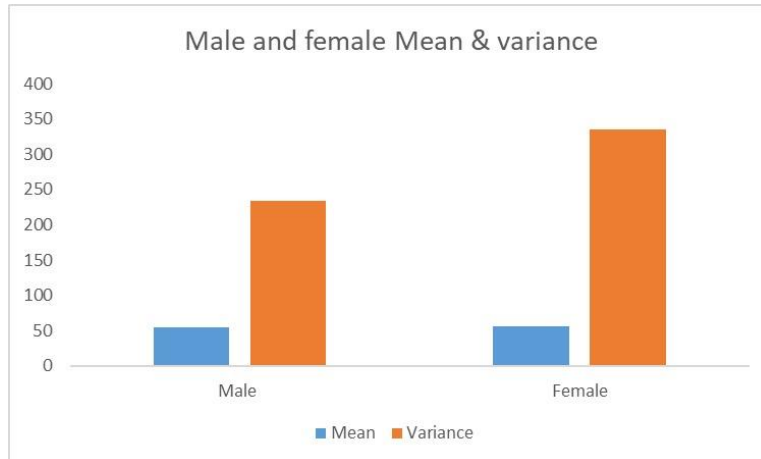


Figure- 2: Graphical representation of the mean & variance difference between male and female students.

From the above graph, we find that variance of female students is higher than male students. Male and female students mean of score is equal. According to the variance of female students' academic performance in reference to study habit and metacognitive skill is higher than those of male students' academic performance in reference to study habit and meta cognitive skills.

4.0. Conclusions

In the current study it is attempt to explore the effect of study habit in academic performance in relation to study habit in secondary school students. The study focuses on the student habit pattern and academic performance. The study also focuses on the difference of boy and girl students' academic performance. Study habits seem to be important determinant of academic performance. This study has been conducted on the students of secondary school in West Bengal. The data is analyzed by descriptive and inferential statistics. The study found the relation between study habit and academic performance, boy and girl students' academic performance difference and elementary & secondary level study habit difference.

According to the first objectives the study was found that the coefficient of correlation between study habit and academic performance in secondary school students is positive and high. So highly attend student can achieve high scoring academic filed. According to the second objectives and the respective null hypothesis the study was found that mean difference between boy and girl students in reference to habit pattern is not significant. So there is no significant relation between student academic performance and habit pattern. According to the third objectives and the respective null hypothesis the study was found that mean difference between boy and girl students in reference to habit pattern is not significant. So there is no significant relation between academic performance and habit pattern in reference to the elementary and secondary level.

Future Scope

Longitudinal Studies: Conducting longitudinal research to track the study habits and academic performance of students over several years to identify trends and long-term effects.

Diverse Educational Settings: Expanding the research to include students from various educational settings, such as rural vs. urban schools, to understand how study habits may differ across environments.

Impact of Technology: Investigating how modern technology and digital learning tools influence study habits and academic performance among secondary school students.

Cultural Factors: Exploring how cultural backgrounds affect study habits and their resulting impact on academic achievement, potentially leading to tailored educational strategies.

Intervention Programs: Developing and testing intervention programs aimed at improving study habits and assessing their effectiveness on academic performance.

Role of Socioeconomic Status: Examining how socioeconomic factors influence study habits and academic performance, providing insights for targeted support programs.

Comparative Studies: Comparing the study habits of high-performing students with those of lower-performing peers to identify effective strategies that can be adopted by all students.

Psychological Factors: Investigating the role of psychological factors, such as motivation, anxiety, and self-efficacy, in shaping study habits and academic success.

ISBN NO: 9798303893870

Teacher and Parent Involvement: Studying the influence of teachers' and parents' roles in fostering effective study habits and their correlation with student performance.

Cross-Disciplinary Approaches: Integrating insights from psychology, education, and sociology to develop a comprehensive understanding of the interplay between study habits and academic achievement.

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