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A DIAGNOSTIC STUDY ON EXPOSING THE STUDENTS' CHALLENGES IN ADOPTING E-LEARNING IN COVID PANDEMIC SITUATION

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ABSTRACT

The study aimed to reveal the higher secondary students challenges about adopting and accessing the E-Learning especially during this COVID 19 Pandemic period. The study also focused the gender group opinion about the challenges. The study did in Thanjavur district with 138 private school students as respondents. The researcher followed the convenience sampling techniques. The researcher used structured questionnaire as research tool. Weighted average mean and Anova statistical test were used to evaluate the primary data. The study finding would assist the educational policy makers to frame the structure E-Learning policy that help the students without any hindrances.

Key Words: Challenges, Covid, E-Learning, Pandemic, Students.

INTRODUCTION

Technology has become a pivotal element in contemporary education, particularly highlighted by the reliance on digital platforms during the COVID-19 pandemic. As educational institutions adapted to lockdowns and social distancing measures, technology-enabled teaching methods became essential to maintaining continuity in learning. Information and Communication Technology (ICT)-based resources, such as e-books, virtual classrooms, online assessments, and digital libraries, now play a significant role in supporting academic activities and facilitating connections between students and teachers.¹ This transition to ICT has provided unprecedented flexibility, allowing students to engage in learning from any location and at any time, thus enhancing accessibility and convenience in education. Despite these benefits, the shift to online learning has also highlighted a range of challenges, particularly among higher secondary students, who may face limited access to necessary devices or internet connectivity. Addressing these challenges is critical for fostering an inclusive educational environment where all students can benefit from technological advancements in education.² Therefore this study aims to investigate the specific barriers experienced by higher secondary students in accessing online classes, providing insights that may inform future policies to enhance digital equity in education.

REVIEW OF LITERATURE

The selected studies collectively highlight significant challenges faced by students in adapting to digital learning, especially during the COVID-19 pandemic, with common issues including lack of internet access, inadequate technological infrastructure, and reduced academic engagement.

Adan and Anwar (2020) explored the attitudes of higher secondary students in Pakistan towards digital learning, revealing that many students were unable to achieve satisfactory results. Major barriers included technical and financial constraints that limited internet access, leaving

students dissatisfied with the effectiveness of online classes. The lack of face-to-face interaction also emerged as a significant factor, with students feeling disconnected from their teachers.

Kara and Gök (2020) found similar sentiments among students, noting that the shift to online education negatively impacted academic progress. Their study suggested that online teaching was perceived as less effective than traditional methods, as students experienced disrupted learning growth. Financial difficulties further compounded access issues, with many students struggling to participate in online classes due to high costs of technology and internet services.

Karademir et al. (2020) examined digital learning challenges, particularly in rural areas where students faced limited access to the latest technological devices. Insufficient internet infrastructure further hindered effective participation in online classes, with rural students being disproportionately affected.

Zhong (2020) provided insights into students' reluctance toward online learning, attributing this to the lack of interaction with teachers. The absence of real-time engagement was seen as a critical factor undermining students' motivation and interest in online education.

Finally, **Abaid et al. (2021)** conducted a cross-sectional study in Pakistan, collecting data from 550 students to assess online learning experiences. They found that 88% of respondents lacked reliable internet access, with inadequate infrastructure posing significant barriers to online class attendance.

These studies collectively emphasize the importance of addressing the technical, financial, and interactive components of digital learning to make it a more viable alternative. The findings suggest that for online learning to be effective, it is crucial to ensure equitable access to technology and reliable internet, especially in underserved communities. Additionally, fostering meaningful teacher-student interactions online could help improve student engagement and satisfaction.

RESEARCH METHODOLOGY

RESEARCH DESIGN

The researcher followed the descriptive nature of research. The research was conducted in Thanjavur District. The data includes both primary and secondary information. The primary information gathered from the 137 private school higher secondary students. The researcher adopted convenience sampling techniques. The primary information gathered with the help of structured five point Likert scale questionnaire. The gathered data were analyzed using the mean and one-way Anova test. The statistical tools were performed via SPSS IBM 21 package.

RESEARCH OBJECTIVES

- To identify students challenging factor of adopting E-Learning during the COVID 19
- To discriminate the gender group of the respondents and students challenging factor of adopting E-Learning.

3.3 VARIABLES

Demographic Variable: Gender, Class, School Name.

Challenging Factors used in the study

- Lack of Gadgets
- Poor Network Issue
- Unaware of technology usage
- Lack of financial support
- Lack of individual interest
- Family situation
- Poor environment facility
- Lack of Concentration
- More interference
- Creates health issues

DATA ANALYSIS & INTERPRETATION

Table 1
weighted average mean of students challenging factor of adopting E-Learning

Factors	5	4	3	2	1		WAM	Rank
Lack of Gadgets	34	35	10	40	18	137	3.20	VIII
	170	140	30	80	18	438		
Poor Network Issue	68	46	13	8	2	137	4.24	II
	340	184	39	16	2	581		
Unaware of technology usage	47	32	0	27	31	137	3.27	VII
	235	128	0	54	31	448		
Lack of financial support	60	30	15	17	15	137	3.75	IV
	300	120	45	34	15	514		
Lack of individual interest	36	25	9	39	28	137	3.01	X
	180	100	27	78	28	413		
Family situation	57	35	0	24	21	137	3.61	V
	285	140	0	48	21	494		
Poor environment facility	52	55	4	14	12	137	3.88	III
	260	220	12	28	12	532		
Lack of Concentration	46	35	15	25	16	137	3.51	VI
	230	140	45	50	16	481		
More interference	37	28	12	30	30	137	3.09	IX
	185	112	36	60	30	423		
Creates health issues	69	53	3	5	7	137	4.26	I
	345	212	9	10	7	583		

The above table 1 mentioned the weighted average mean and its rank of students challenging factor of adopting E-Learning. The result shows that the create health issues scored 4.26, ranked first among the factors. Further, the results followed as poor network issue mean value is 4.24, placed second rank. poor environment facility ranked three with 3.88 mean value, lack of financial support ranked four with 3.75 mean value, family situation ranked fifth with 3.61 mean value, lack of concentration possessed sixth rank with 3.51 mean value. Then, unaware of technology usage ranked seventh with 3.7 mean value, lack of gadgets ranked eighth with 3.20 mean value, more interference possessed ninth rank with 3.09 mean value and lack of individual interest ranked tenth with 3.01 mean value.

ANOVA TEST FOR GENDER GROUPS AND STUDENTS CHALLENGING FACTOR OF ADOPTING E-LEARNING

Table 2
Anova test for gender groups and students challenging factor of adopting E-Learning

		Sum of Squares	Df	Mean Squares	F	Sig
Lack of Gadgets	Between Groups	2.427	2	0.617	4.712	0.000
	Within Groups	48.902	135	0.28		
	Total	49.739	137			
Poor Network Issue	Between Groups	5.545	2	3.412	5.987	0.432
	Within Groups	67.721	135	0.278		
	Total	82.717	137			

Unaware of technology usage	Between Groups	4.071	2	7.261	5.45	0.020
	Within Groups	39.813	135	0.794		
	Total	44.521	137			
Lack of financial support	Between Groups	160.44	2	0.251	7.841	0.061
	Within Groups	7.414	135	0.159		
	Total	199.601	137			
Lack of individual interest	Between Groups	1.857	2	1.487	15.645	0.021
	Within Groups	128.14	135	1.025		
	Total	140.687	137			
Family situation	Between Groups	5.678	2	2.624	21.047	0.014
	Within Groups	44.821	135	0.617		
	Total	56.301	137			
Poor environment facility	Between Groups	22.45	2	16.718	4.369	0.781
	Within Groups	58.751	135	0.697		
	Total	78.21	137			
Lack of Concentration	Between Groups	48.21	2	0.698	12.564	0.728
	Within Groups	32.501	135	0.146		
	Total	79.178	137			
More interference	Between Groups	6.871	2	0.924	6.481	0.002
	Within Groups	5.981	135	0.357		
	Total	82.502	137			
Creates health issues	Between Groups	9.781	2	0.677	21.971	0.904
	Within Groups	108	135	0.316		
	Total	112.914	137			

The above Anova table result indicates the opinion difference between gender groups of the respondents and the students challenging factor of adopting E-Learning. The results shows that the among ten factors only five factors were significant they are Lack of gadgets with the significant value of 0.000 which is < 0.05 followed by unaware of technology usage with the sig value of 0.020, lack of individual interest has significant value of 0.021, family situation has significant value of 0.014 and more interference has significant value of 0.904. The other factors were not significant, the p-value were > 0.05 .

CONCLUSION

The study explored the challenging factors of higher secondary school studying students to adopting the e-learning during this covid pandemic. The researcher pointed out ten factors and took from literature survey. The result of the study revealed that the many students faced more health problems due to these e-learning practices. The respondent's feels very tired, eye problem, mental stress etc. Further, the study focused the gender opinion about the challenging factor, the ANOVA results reveals that Lack of gadgets, unaware of technology, lack of individual interest, family situation and more interference had difference opinion among male and female. Thus the study clearly explore that the current e-learning practice is head burden to the students. Therefore the government and others educational policy maker can frame out the structured e-learning policy which will be comfort to the students.

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