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A Study on Higher Education Students 'Web and Mobile App Usage'

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ABSTRACT

This article examines a survey on the useage of web and mobile application by students in higher education. It draws attention to how commonplace electronic gadgets are in the learning environment, and how important these applications are to successful learning. Students use various web apps like Google Classroom, Kahoot, Edmodo, and Socrative, along with mobile apps such as Quizlet, TED, Skillshare, and Evernote. These applications provide flexible and customized learning experiences, support instructors in tracking students' progress, and promote active engagement in the learning environment.According to scientific study, the study examines how students in higher education use mobile and online applications in light of the increasing use of mobile devices in learning environment. These applications are seen to be vital tools for students because they facilitate collaboration, interactive learning, and resource access. Higher education institutions must use these applications because they provide students more influence and reveal information about what they are learning.To sum up, the incorporation of online and mobile applications has revolutionized the field of education by providing engaging educational opportunities that foster digital literacy, problem-solving skills, and critical thinking. This helps pupils in general education as well as higher education. Determining how much higher education students utilize mobile applications for learning is the main goal of the research.

Keywords: Higher Education Students, Web applications, Mobile applications. digital literacy

INTRODUCTION:

Education has a vital role in democratic societies, particularly in India. The nation is obviously dedicated to offering complimentary educational opportunities to young people until they reach the age of fourteen (Suprabha & Subramonian, 2021). In additionally elucidates the transformative impact of computer technology on education, particularly in its potential to ameliorate educational opportunities for students residing in rural areas (Alex, 2021). The recent development of e-learning has brought about substantial changes in our conduct within both social and academic contexts (Thang & Sapna, 2021). The use of technology enriches our experiences and facilitates the exploration of novel learning possibilities. E-learning assumes a pivotal position in fostering motivation among many stakeholders, including educators, learners, and scholars. The discipline has had significant expansion and is increasingly being acknowledged (Rafiq, 2020: Richard & Haya, 2009). It is said that contemporary technology, such as social media platforms and mobile applications, are more prevalent in the everyday routines of students in higher education. According to Mâță et al. (2021), these technologies provide adaptable and individualized learning opportunities. In this context the present study was taken up to find out the level of the use of web and mobile applications among higher education students.

REVIEW OF RELATED LITERATURE

According to (Rafiq, 2020) examined that (TAM) was used to evaluate Pakistani higher education students' attitudes about e-learning. This mixed-method study includes surveys and interviews with 2180 individuals. The research reveals that male students see e-learning more positively than female pupils. The TAM

accurately captures these attitudes. If the government invests in IT infrastructure and gives financial assistance, students' e-learning attitudes may improve, according to the research.

Alex (2021) emphasized the importance of education in democracy and society, particularly in India. India wants to educate 14-year-olds for free. Computer technology may increase learning, especially for rural pupils, according to the research. This quantitative study has four purposes. These aims examine how instructional medium, parents' education, and family income impact students' online learning attitudes. Students, instructors, and school officials gain from the research.

According to (Khlaif & Salha, 2022) investigate students' and teacher opinions on mobile technology usage in higher education. The mixed-method research included 39 instructors and students for qualitative data and 300 graduate students for quantitative data. The study indicated that students' views, service quality, cost, and instructors' roles greatly affect higher education mobile technology integration. The research reveals what influences pupils' mobile device usage in school.

(Jurayev, 2023) emphasized learners increased mobile device usage for studying. It integrates mobile learning systems and online resources to create a new educational design. It is developed for intense teaching and learning in higher education. Knowledge assessment techniques and obstacles are also covered. It also suggests utilizing MIT App Inventor to create mobile learning applications and gives trial outcomes in tables.

According to (D. M. D. Oliveira et al., 2021) examined in this study the students' usage of mobile applications in higher education classrooms improved data collecting to correctly track students' app use. Grounded Theory was utilized to study 77 Communication and Arts students. Facebook and Instagram are used heavily in class, according to preliminary data. According to the survey, students underestimate their app use time and agree that applications might distract them in class.

The researcher (Voshaar et al., 2023) investigated in this study how a pleasant mobile learning software influences basic accounting students' performance. The app provides quizzes and materials for first-year university students. Students who actively utilise the software score better on tests. They examined retaker students using OLS and 2SLS regression to confirm the app's positive effects. Excellent 2SLS strategy: students choose the app. This research shows how mobile gadgets affect education and student achievement.

OBJECTIVES OF THE STUDY

The objectives of the present study are:

- To find out the students' use of web and mobile applications in higher education.
- To examine differences in students' online and mobile app use in higher education based on gender, study discipline, location, and institution.

HYPOTHESES OF THE STUDY

In line with the above objectives, the following hypotheses were formulated:

- The Higher Education college Students of Pudukkottai District do not use web and mobile applications for their learning.
- There is no statistically significant difference between the mean web and mobile application use scores of Pudukkottai District's male and female higher education college students.
- There is no significant difference between the mean scores of Arts and Science Higher Education college Students in Pudukkottai District on the use of web and mobile applications.
- There is no significant difference between the mean web and mobile applications use scores of the Hosteller and Day scholar Higher Education college Students of Pudukkottai District.
- There is no significant difference between the mean web and mobile applications use scores of the Rural and Urban Higher Education college Students of Pudukkottai District.

RESEARCH METHODOLOGY:

Researchers randomly selected 310 undergraduate Arts & Science students for this study. They developed "A study on higher education college students web and mobile app usage**"**. This tool targeted online, Zoom, Google Meet, Facebook, WhatsApp, Snapchat, Instagram, Google Maps, YouTube, Skype, SkyDrive,

Evernote, Dropbox, and Google Apps. The investigator collected data at the College of Arts and Science. The college principals gave them permission to utilise the technology. Before giving it to students, the researcher described the study's goal. Students completed the tool alone. The sample answered all tool questions since the investigator was present.

ANALYSIS OF WEB AND MOBILE APPLICATIONS USE SCORES

INFERENTIAL ANALYSIS

Null Hypothesis: 1($H_0$1)

There is no significant difference between the mean web and mobile applications Use Scores of higher education college students, sub-grouped on the basis of Gender.

In order to find out whether there is a significance of the difference between the mean web and mobile applications Use Scores of male and female higher education college students, the above Null hypothesis was formulated and the t-test was attempted to test the same.

Table No 1

Mean & Standard Deviation of Web and Mobile Applications Use Scores of Male and Female Higher Education college Students (HECS) Pudukkottai District

Gender	N	Mean	S.D	't'value
Male	118	74.43	16.72	0.674*
Female	192	73.05	18.68	

* Not significant at 0.05 level

Table (1) analyses online and mobile apps. Use Pudukkottai district male and female HECS scores as the sample. The average online and mobile app The use scores of male higher education students are 74.43 and female students are 73.05, with Standard Deviations of 16.72 and 18.68.

The calculated t-value of 0.674 is lower than the table value of 1.97 at a 0.05 significance level. It suggests that male and female college students utilise Web and Mobile Applications Technologies similarly. Null hypothesis: *"There is no significant difference between the mean web and mobile applications Use Score of Higher education students, sub-grouped on the basis of their Gender"* is accepted. Additionally, female students had a lower mean Web and mobile application Use Score than male students. Thus, male students utilise online and mobile apps for studying better than female students.

Null Hypothesis: 2 ($H_0$2)

There is no significant difference between the mean web and mobile applications Use Scores of arts and science higher education students of pudukkottai district.

In order to find out whether there is a significant difference between the mean web and mobile applications Use Scores of Arts and Science higher education students of pudukkottai district, the above null hypothesis was formulated and the t-test was attempted to test the same.

Table No 2

Mean Standard Deviation and t- value of Web and Mobile Applications Use Scores of Arts and Science Higher Education Students Pudukkottai District

Discipline of study	N	Mean	S.D	't'value
Arts	108	71.27	16.52	
Science	202	74.80	18.59	1.71*

*Not significant at 0.05 level

Table (2) analyses the Web and mobile application use scores of Pudukkottai district arts and science higher education students. Arts students' mean online and mobile app use score is 71.27, science students' is 74.80, and their Standard Deviations are 16.52 and 18.59.

The calculated t-value of 1.71 is lower than the table value of 1.97 at 0.05 significance. It means Pudukkottai higher education students' Web and mobile app use is similar for Arts and Science. Thus, the null hypothesis, *"There is no significant difference between the mean web and mobile applications Use Score of Arts and Science higher education students of pudukkottai district,"* is rejected. Additionally, Arts students have a lower mean online and mobile application Use Score than Science students. Thus, Science students use online and mobile apps for studying better than Arts students.

Null Hypothesis: 3 ($H_0$3)

There is no significant difference between the mean Web and mobile applications Use Scores of Hosteller and Day-Scholar higher education students.

In order to find out whether there is a significant difference between the mean Web and mobile applications Use Scores of Hosteller and Day-Scholar higher education students of pudukkottai district, the above null hypothesis was formulated and the t-test was attempted to test the same.

Table No 3

Mean Standard Deviation and t- value of Web and Mobile Applications Use Scores of Hosteller and Day-Scholar Higher Education Students Pudukkottai District

Type of Student	N	Mean	S.D	't'value
Hosteller	81	76.33	19.38	.52*
Day-Scholar	229	72.60	17.35	

*Not significant at 0.05 level

Table (3) analyses the Web and mobile application Use Scores of Pudukkottai district Hosteller and Day-scholar higher education students. Hosteller students had a mean Web and mobile application Use Score of 76.33 and Day Scholar students 72.60, with Standard Deviations of 19.38 and 17.35.

The calculated t-value of 1.52 is lower than the table value of 1.97 at 0.05 significance. Hosteller and day-scholar higher education students in Pudukkottai district use web and mobile apps similarly. Thus, the null hypothesis, *"There is no significant difference between the mean web and mobile applications Use Score of Hosteller and Day-scholar Higher education students of pudukkottai district,"* is rejected. Hosteller has a higher mean online and mobile application Use Score than Day-scholar. Thus, hostellers use online and mobile apps for studying better than day-scholars.

Null Hypothesis: 4 ($H_0$4)

There is no significant difference between the mean web and mobile applications Use Scores of Rural and Urban higher education students of pudukkottai district.

In order to find out whether there is a significant difference between the mean Web and mobile applications Use Scores of Rural and Urban Higher education students of pudukkottai district, the above null hypothesis was formulated and the t-test was attempted to test the same.

Table No 4
Mean Standard Deviation and t- value of Web and Mobile Applications Use Scores of Rural and Urban Higher Education Students Pudukkottai District

Locality of the Institution	N	Mean	S.D	't' value
Rural	120	73.27	16.87	0.24*
Urban	190	73.76	18.63	

*Not significant at 0.05 level

Table (4) shows the online and mobile application use scores of our sample of rural and urban higher education students from Pudukkottai district. The mean online and mobile application Use Scores of rural students are 73.27 and urban students are 73.76, with Standard Deviations of 16.87 and 18.63.

The estimated t-value of 0.24 is lower than the table value of 1.97 at a 0.05 significance level. It suggests that rural and urban college students utilise Web and mobile apps similarly. Thus, the null hypothesis, *"There is no significant difference between the mean Web and mobile applications Use Scores of Rural and Urban higher education students of pudukkottai district,"* is accepted. Additionally, rural students have a lower mean online and mobile application Use Score than urban students. Thus, urban students use online and mobile apps for studying better than rural students.

DELIMITATION OF THE STUDY

The major delimitations of the study are:

- ✓ The study has been conducted only on a sample of higher education students from Arts and Science students of pudukkottai district.
- ✓ Due to time constraints, the sample was limited only to 310 students and the study is limited only to a few select demographic variables like gender, the discipline of study, place of stay and locality of the institution.

RECOMMENDATIONS AND SUGGESTION FOR THIS STUDY:

- ✓ More areas to study in the future: This study only looked at Arts and Science college students in the Pudukkottai area. To get a better picture of how mobile and online apps affect people, future research should try to include students from a range of fields and places.
- ✓ A lengthy study should be done to find out what long-term benefits using these kinds of apps have on students' schoolwork.
- ✓ Teachers should be able to learn how to use these apps to improve teaching and learning through programmes offered by universities.
- ✓ For maximum usefulness, an introduction programme that shows kids these apps at the beginning of the school year might be helpful.
- ✓ These apps should be standard parts of education, so colleges and universities should think about making them part of their academic rules.
- ✓ To get a fuller picture, future research should include more demographic factors, such as age, income, and level of schooling.
- ✓ Qualitative data: Along with polls, qualitative methods such as focus groups and conversations could give us a deeper look into what it's like to be a student.
- ✓ Comparative Analysis of Traditional Methods: It might be interesting to see how these apps compare to traditional ways of teaching.

- ✓ Learning from schools in other countries could give us a more complete picture of how well the apps work around the world.
- ✓ Take into account the opinions of stakeholders: Teachers, office workers, and even parents can provide useful information, and these views should be incorporated into future studies.
- ✓ Technology Updates: Because these apps are changed so often, their features and usefulness should be checked on a regular basis.

CONCLUSIONS:

A research found that college students benefit from using web and smartphone applications. Most students believe that these apps help them with their schooling and that they couldn't function without them. These days, self-study, group discussions, online courses, quizzes, webinars, conferences, video chats, data collection, and VIVA-VOCE are all used in higher education. According to the survey, learning resources used by higher education students include Quizlet, TED, Skillshare, Evernote, Google Classroom, and Kahoot. Teachers may monitor students' progress and engage them using these tools. Digital skills and critical thinking need them. These technologies should be used by universities to meet the evolving needs of their student body.Higher education institutions need to use these technologies in order to meet the changing needs of their student body.

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