

UTILIZATION AND ATTITUDE TOWARDS MOBILE PHONES FOR LEARNING AMONG HIGHER SECONDARY SCHOOL STUDENTS IN DHARUMAPURI DISTRICT

Dr. P. Sattanathan*

ABSTRACT

The smartphone is essential for every activity of our day-to-day life i.e., (e-banking, phone pay, google pay, gas booking, e-commerce, e-marketing, e-learning etc..). The main objectives of the study are to find out the significant difference between/among the subgroups of demographics variable of higher secondary school students in their mean score of the utilization of mobile phones for learning and to find out the significant correlation between utilization of mobile phone for learning and attitude towards mobile phone for learning among higher secondary school students. The researcher adopts a descriptive survey method and uses a simple random sampling technique for data collection from 315 higher secondary school students selected for the collection of data. The study found that there is a significant difference between boys and girls of higher secondary school students in their mean score of the utilization of mobile phones for learning. The study also found that there is a significant positive correlation between the utilization of mobile phones for learning and attitude towards mobile phones for learning among higher secondary school students.

Keywords: Utilization, Attitude, Mobile Phone, Learning, Higher Secondary School Students.

Introduction

A mobile phone is a wireless-handled device that allows users to make and receive calls and send text messages, among other features. Today mobile phones are packed with many additional features, such as web browsers, games, cameras, video players and even navigational systems. The types of Mobile phones are smartphones, camera phones, music phones and 5G phones.

Uses of Mobile Phones in Education

In the present world of science and technology, it is thought to imagine schools and colleges without computers and the Internet. It is a big reality that students take a lot of help from the internet nowadays. The different educational website provides the required information to the students helping them in their exam, assignments, projects, etc, the Internet also helps in creating interest in learning a subject by providing various resources like videos, images and audio files from reliable sources. Thus, educational apps and learning apps contribute to the teaching-learning process and can reshape the future of education.

Digital content with textbooks equipped with QR codes and ICT articles, data available from the State Council of Educational Research and Training (SCERT) show that there have been over 2.1 crore QR code scans by students and teachers from their books.

The main product is a mobile app named BYJUS -A learning APP launched in August 2015. It provides educational content mainly to school students from classes 1 to 12 in India such as IIT - JEE, NEET, CAI, and IAS as well as for international examinations such as GRE and GMAT.

* Associate Professor, Department of Education and Management, Tamil University, Thanjavur, Tamil Nadu, India.

Attitude towards Mobile Phones for Learning

An influential model of attitude is the multi-component model, in which attitudes are evaluations of an object that has affective, behavioural and cognitive components in the ABC model.

Need and Significance of the Study

In the recent pedagogical process, teaching and learning are very challenging for teachers and students. Despite having the biggest challenges teachers face in the 21st-century classroom is the struggle of retaining student interest and engagement while students remain connected to the outside world through their mobile devices". Aaron and Lipton (2017) state that "digital devices and a non-restrictive classroom policy on the use of those devices contributed to poorer retention of classroom material."

The government of Tamil Nadu through the state council of educational research and training are enhancing teaching-learning processes using digital resources in the classroom.

At this juncture, how do the students utilize the mobile phone and to what extent is their attitude towards using the mobile phone for learning, Hence, the present study was taken by the investigator to find out the level of utilization and attitude towards mobile phone learning among higher secondary school students in the Dharumapurai district.

Scope of the Study

The scope of the present study may help the students who have been involved in the study to understand their level of utilization of mobile phones for learning and also, they may understand their level of attitude towards mobile phones for learning. The tools can teach students to develop better study habits, like time management and organizational skills. Traditional lecture-based classroom teaching is now supplemented with technology-enabled learning and this included mobile phones. the findings of this study are necessary for teacher educators, administrators and government authorities to arrange in-service training for all kinds of phones teacher to enhance the teaching-learning process.

Statement of the Problems

The present study is entitled **Utilization and Attitude Towards Mobile Phones for Learning among Higher Secondary School Students in Dharumapuri District.**

Objectives of the Study

- To find out the significant difference between the mean score of the utilization of mobile phones for learning among higher secondary school students with respect to their gender.
- To find out the significant difference between the mean score of the utilization of mobile phones for learning among higher secondary school students with respect to their locality of the school.
- To find out the significant difference between the mean score of the utilization of mobile phones for learning among higher secondary school students with respect to their medium of instruction.
- To find out the significant difference between the mean score of the utilization of mobile phones for learning among higher secondary school students with respect to their types of management.
- To find out the significant correlation between the utilization of mobile phones for learning and attitude towards mobile phones for learning among higher secondary school students.

Hypothesis of the Study

- There is no significant difference between the mean score of the utilization of mobile phones for learning among higher secondary school students with respect to their gender.
- There is no significant difference between the mean score of the utilization of mobile phones for learning among higher secondary school students with respect to their locality of the school.
- There is no significant difference between the mean score of the utilization of mobile phones for learning among higher secondary school students with respect to their medium of instruction.
- There is no significant difference between the mean score of the utilization of mobile phones for learning among higher secondary school students with respect to their types of school.
- There is no significant correlation between the utilization of mobile phones for learning and the attitude towards mobile phones for learning among higher secondary school students.

Limitations of the Study

- The present study has the following limitations,
- The investigator selected 315 higher secondary school students from XI standard in Dharumapuri district in Tamil Nadu, India.
- The investigator selected only nine higher secondary schools used for the present study.

Method of the Study

Considering the objectives and hypothesis of the study, the investigator selected the descriptive survey method for the present study.

Sample of the Study

The sample consisted of 315 higher secondary school students from standard in Dharumapuri district, Tamil Nadu, India.

Statistical Technique Used in the Study

Percentage analysis, t-test, ANOVA, and correlation were used for analysing the collected data using SPSS 29.0 version.

Testing the Hypotheses

Hypothesis 1

There is no significant difference between the mean score of the utilization of mobile phones for learning among higher secondary school students with respect to their gender.

This hypothesis was tested using a t-test.

Table 1

Sub-samples	N	Mean	S. D	't'-Value	Result
Gender	Boys	148	116.45	2.12	Sig
	Girls	167	119.07		

It is inferred from the above table no-1 shows that the calculated t-value (2.12) is greater than the critical value of 1.97 at the 0.05 level. Hence, the null hypothesis is rejected. Thus, there is a significant difference between the mean scores of boys and girls in the utilization of mobile phones for learning among higher secondary school students with respect to their gender. Girls students are having a higher mean score for the utilization of mobile phones for learning than boy students.

Hypothesis 2

There is no significant difference between the mean scores of the utilization of mobile phones for learning among higher secondary school students with respect to their locality of the school.

This hypothesis was tested using a t-test.

Table 2

Locality of School	N	Mean	S. D	't'-Value	Result
Rural	176	117.8800	10.8400	0.07	NS
Urban	139	117.7900	11.16.00		

Table no-2 shows that the calculated t-value (0.07) is less than the critical value of 2.59 at the 0.01 level. Hence, the null hypothesis is accepted. Thus, there is no significant difference between rural and urban higher secondary school students in their mean score of the utilization of mobile phones for learning higher mean score of the utilization of mobile phone for learning than urban school students.

Hypothesis 3

There is no significant difference between the mean scores of the utilization of mobile phones for learning among higher secondary school students with respect to their medium of instruction.

This hypothesis was tested using a t-test.

Table 3

Medium of Instruction	N	Mean	S.D	't'-Value	Result
Tamil medium	153	117.6900	10.8900	0.22	NS
English medium	162	117.9700	11.0600		

The above Table no-3 shows that the calculated 't'-value (0.22) is less than the critical value of 2.59 at the 0.001 level. Hence, the null hypothesis is accepted. Thus, there is no significant difference between Tamil medium and English medium school students in their mean scores for utilizing mobile phones for learning. However, English medium school students are having a higher mean score for the utilization of mobile phones for learning than Tamil medium school students.

Hypothesis 4

There is no significant difference between the mean scores of the utilization of mobile phones for learning among higher secondary school students with respect to their types of management.

This hypothesis was tested using an F-test.

Table 4

Source of Variation	Sum of Squares	df	Mean-Variance of Squares	'F' value	Level of Significance
Between groups	7.778	2	3.889	0.32	NS
Within groups	37764.286	312	121.039		
Total	37772.064	314			

The above table shows that the computed 'F' 0.32 value is 0.32 is less than the critical value of 3.03 at the 0.05 level and hence it is not significant at the 0.05 level. Consequently, the null hypothesis is not rejected. It can be said that there is no significant variance among higher secondary school students in their mean score of the utilization of mobile phones for learning. It is inferred that the type of school does not have any significant role in the utilization of mobile phones for learning.

Hypothesis 5

There is no significant correlation between the utilization of mobile phones for learning and the attitude towards mobile phones for learning among higher secondary school students.

This hypothesis was tested using Karl Pearson's Product Moment Coefficient of Correlation.

Table 5

Correlations		
Mobile utilization for learning	Mobile utilization for learning	Attitude towards mobile utilization for learning
Mobile utilization for learning	1	0.213**
Attitude towards mobile utilization for learning	0.213**	1

Since the level of significance is at 0.01 level, the null hypothesis is rejected.

Hence, it is concluded that there is a significant correlation between mobile utilization and attitude towards mobile utilization for learning. Since the sample correlation is positive, it indicates that if the mobile utilization for learning is more the attitude towards mobile utilization for learning is also more and versa.

The Finding of the Study

- It is found that there is a significant difference in the mean scores of utilizations of mobile phones for learning among higher secondary school students with respect to their gender.
- It is found that there is no significant difference in the mean scores of utilizations of mobile phones for learning among higher secondary school students with respect to their locality of the school.
- It is found that there is no significant difference in the mean scores of utilizations of mobile phones for learning among higher secondary school students with respect to their medium of instruction.
- It is found that there is no significant difference in the means scores of utilizations of mobile phones for learning among higher secondary school students with respect to their type management.
- The finding of the study revealed that there is a significant correlation between the utilization of mobile phones for learning and attitude towards mobile for learning among higher secondary school students.

Conclusion

The present study found that there is a significant difference between boys and girls of higher secondary school students in their mean score of the utilization of mobile phones for learning. Hence, the government takes necessary steps for the gender disparity among school students. The study also found that there is a significant positive correlation between the utilization of mobile phones for learning and attitude towards mobile phones for learning among higher secondary school students. It means the attitude towards mobile phones for learning is to enhance the utilization of mobile phones for learning. The parents, school teachers, teacher educators and the programme of school education must support the students to utilize the mobile phone for their learning.

References

1. Adelson, J.L., and Mc Coach, D. (2011). Development and Psychometric properties of the math and me survey: Measuring third through sixth graders' Attitude towards Mathematics. *Measurement and Evaluation in Counselling and Development*, 44(4), 225-247.
2. Ashcraft, M.H. (2002). Math anxiety: Personal, Educational and Cognitive Consequences. *Current Directions in Psychological Science*, 11(5), 181-185.
3. Dreger, R.M, and Aiken, L.R. (1957). Identification of number Anxiety. *Journal of Educational Psychology*, 47,344-351.
4. N.R. Patel, "An investigation into the Mathematical ability of pupils of classes IX and X in the context of sole cognitive and affective variables", PhD thesis. S.P.U. Fourth Survey of Research in Education, Buch, M.B. (1984) pp.704.
5. S. Saha, "A Study on Gender Attitude to Mathematics, Cognitive Style and Achievement in Mathematics", *Experiments in Education*, 35,6 (2007).

