European Journal of Business & Social Sciences
Available at https://ejbss.org/
ISSN: 2235-767X
Volume 07 Issue 6
June 2019

Competency of Students to Use Mobile Technology at High School Level

Mr. S. Rajesh
Research Scholar (Part time)
Department of Educational Technology
Tamil Nadu Teachers Education University
Chennai-600 097

Dr. N. Ramakrishnan
Professor and Head
Department of Educational Technology
Tamil Nadu Teachers Education University
Chennai

ABSTRACT

The present generation cannot be thinking of without mobile technology. It has invaded into all walks of our life. Everybody has become adept in handling mobile devices. Even a three year old child is seen with swiping his fingers over screen of smart phone. How far this mobile technology is being used for promotion of learning among students is the question here. The study is aimed to find out the real cause behind these developments. The objectives of the study are to find out the level of mobile technology competency among high school students and to find out the significant difference in the mobile technology competency among high school students in terms of Gender and residential area.The investigator used the mobile technology competency test prepared and validated by the investigator. The investigator has followed stratified random sampling method for the present study. The investigator has collected a sample of 200 high school students in Cuddalore district. The findings of the study reveal that the high school students are having

ISSN: 2235-767X
Volume 07 Issue 6
June 2019

mobile technology competency at high level. The variables gender and residential area influence the mobile technology competency of high school students. The high school girls have better mobile technology competency than high school boys. The rural high school students do have more mobile technology competency than urban high school students

KEY WORDS: COMPETENCY, MOBILE TECHNOLOGY, STUDENTS, HIGH SCHOOL

NEED FOR THE STUDY

The present generation cannot be thinking of without mobile technology. It has invaded into all walks of our life. Everybody has become adept in handling mobile devices. Even a three year old child is seen with swiping his fingers over screen of smart phone. It is more colourful and attractive. It has lured the young boys and girls. It has attracted children too. Such is the advantages and merits of mobile phones. It has been used by many for their daily routine. From day in to day out people are addicted to mobile phones. It has occupied every sphere of human activity. Its use is more rampant among young populace. It has become inevitable one in our daily routine. More number of mobile applications are on the anvil. It is making the communication and sharing of information faster, safer and easier. The foreign universities are using this mobile technology to communicate with their students. Its use is inimitable in course structure, content delivery, and content evaluation. It keeps students in touch with the system of University administration. Many whatsapp groups have been created for the purpose of sharing knowledge among the students community. These groups do collective exercises and projects online and share it through mobile phones. Videos, images,

ISSN: 2235-767X
Volume 07 Issue 6
June 2019

audio and textual messages can be easily shared with anybody anywhere. Hence,the competency in mobile technology is imminent for the students. Though they are well versed in using mobile technology, how far they are having competency in mobile technology is the prime question. How far this mobile technology is being used for promotion of learning among students is the question here. The study is aimed to find out the real cause behind these developments. The study is entitled as "COMPETENCY OF STUDENTS TO USE MOBILE TECHNOLOGY AT HIGH SCHOOL LEVEL".

TERMS AND DEFINITIONS

Competency – refers to a defining capability or advantage that distinguishes a person from others. Here it refers to capability of using mobile technology.

Mobile Technology - refers to electronic equipment such as mobile phones or small computers that you can use in different places, and thetechnology connected with them

OBJECTIVES OF THE STUDY

The study has formulated the following objectives:

1. To find out the level of mobile technology competency among high school students.
2. To find out thesignificant difference in the mobile technology competency among high school students in terms of Gender.

ISSN: 2235-767X
Volume 07 Issue 6
June 2019

3. To find out the significant difference in the mobile technology competency among high school students in terms of residential area.

HYPOTHESES FORMULATED FOR THE STUDY

The hypotheses stated are as follows:

1. The level of mobile technology competency among high school students is average.
2. There is no significant difference in the mobile technology competency among high school studentsin terms of Gender.
3. There is no significant difference in the mobile technology competency among high school students in terms of residential area.

INSTRUMENTATION

The investigator used the mobile technology competency test prepared and validated by the investigator. There are 40 multiple choice items in the test. Each item is having a value of 1 mark. Thus total marks would be 40.

ESTABLISHING VALIDITY OF THE TOOL:

The investigator has consulted experts in the field of computer education to check the content in the test and its suitability to local needs. It ensures face and content validity of the inventory. According, to Garret, H.E (1967, P, 365) the index of reliability is sometimes taken as a measure of validity.

ESTABLISHMENT RELIABILITY OF THE TOOL: TEST-RETEST METHOD:

ISSN: 2235-767X
Volume 07 Issue 6
June 2019

The test was administrated among the 40 high school studentsin Cuddaloreas a try out and re-administrated among the same 40 high school studentsafter a gap of 15 days. The Pearson product moment correlation was used to find out the correlation between first and second administration of the test. The correlation between the two responses was 0.89. It is high correlation. Hence, it is assumed that the test has reliability.

SCORING:

The scores for all the 40 items were counted. Master table was prepared.

SAMPLE DESIGN

The investigator has followed stratified random sampling method for the present study. The investigator has collected a sample of 200 high school students in Cuddalore district. .

ANALYSIS

Hypothesis 1.

The level of mobile technology competency among high school students is average.

European Journal of Business & Social Sciences
Available at https://ejbss.org/
ISSN: 2235-767X
Volume 07 Issue 6
June 2019

TABLE 1. DESCRIPTIVE ANALYSIS FOR THE MOBILE TECHNOLOGY COMPETENCY AMONG HIGH SCHOOL STUDENTS

S.No	Description	Value
1.	Mean	33.23
2.	Standard Deviation	12.315
3.	Low Score	18
4.	Highest Score	40
5.	Mode	34
6.	Median	33
7.	Theoretical Mean	20

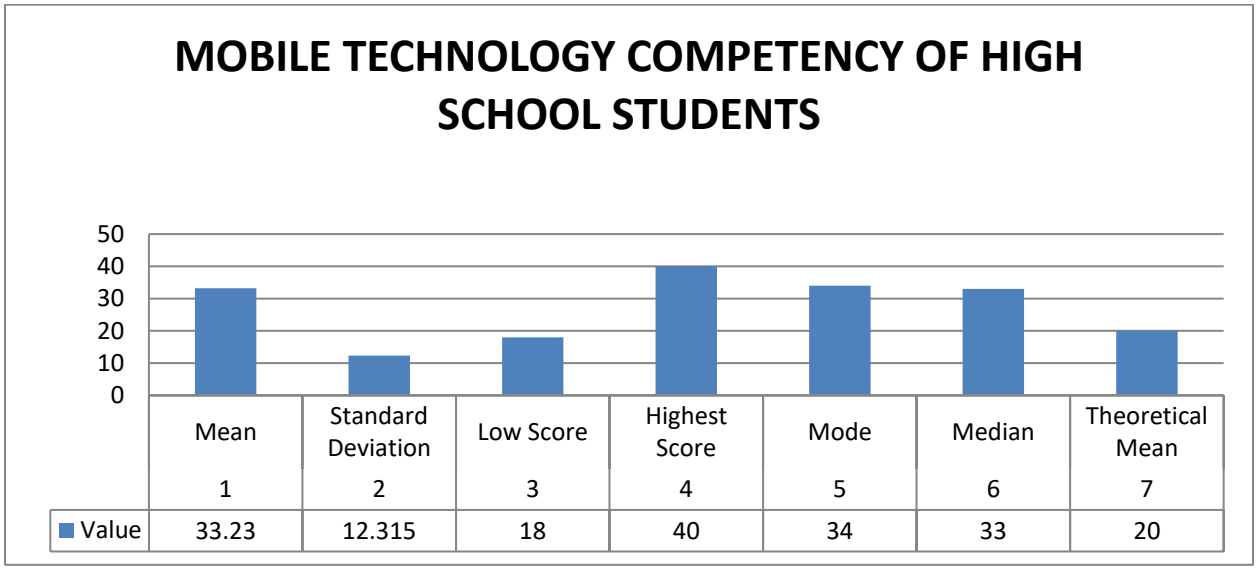
It is evident from Table 1 that the median and mode values for the mobile technology competency among high school students are 33 and 34 respectively. The highest score is 40and the lowest score is 18. The mean value obtained is 33.23 with standard deviation of 12.315. It is well above the theoretical mean of 20. It is proved from the above table that the high school students are having mobile technology competency at high level. So, the hypothesis stated as “the level

ISSN: 2235-767X
Volume 07 Issue 6
June 2019

of mobile technology competency among high school students is average" is rejected.

It may be concluded from the above that the level of mobile technology competency among high school students is high.

FIGURE 1: BAR DIAGRAM SHOWING MOBILE TECHNOLOGY COMPETENCY OF HIGH SCHOOL STUDENTS.



INFERENTIAL ANALYSIS

Inferential analysis always involves the process of sampling and the selection of a small group assumed to be related to the population from which it is drawn. The small group is known as the sample, and the large group is population. Drawing conclusions about populations based on observations of samples are the purpose of inferential analysis.

DIFFERENTIAL STUDIES

ISSN: 2235-767X
Volume 07 Issue 6
June 2019

The dependent variable mobile technology competency among high school students in terms of various subgroups of the sample is presented here. The subgroups selected for the study were gender and residential area.

DEGREES OF FREEDOM

The number of degree of freedom in a distribution is the number of observations (or) values that are independent of each other that cannot be deducted from other. The number of degrees of freedom for the significance of difference between the means of two independent groups would be $N_1 + N_2$-2

HYPOTHESIS: 2

There is no significant difference in the mobile technology competency among high school students in terms of Gender.

TABLE 2: MEAN, S.D. AND 't' VALUE FOR MOBILE TECHNOLOGY COMPETENCY AMONG HIGH SCHOOL STUDENTS IN TERMS OF GENDER

Gender	N	Mean	S.D	't'	Critical Value	Level of Significance
Boys	66	33.13	13.76	2.333	1.645 for df of 198 at 0.05 level	Significant
Girls	134	35.16	12.82			

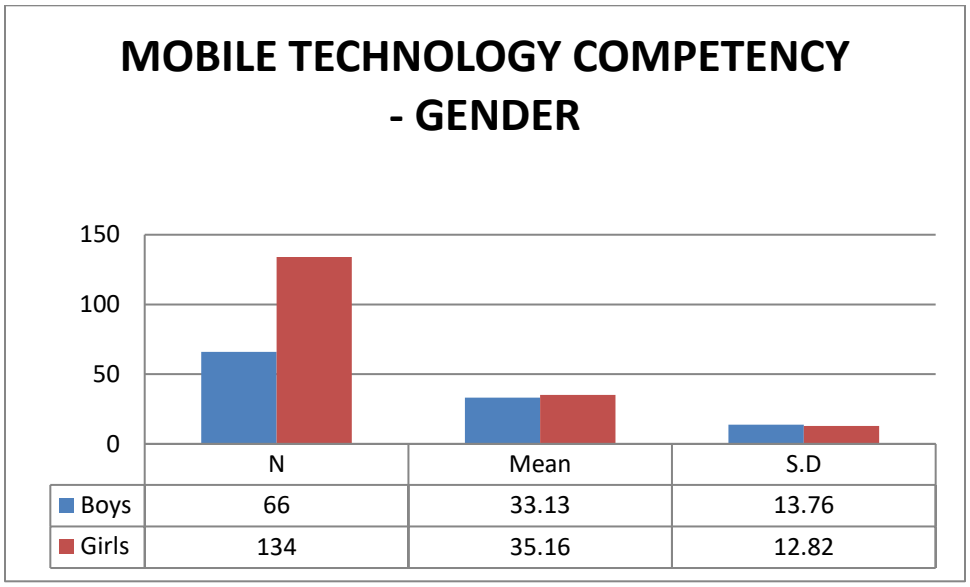
ISSN: 2235-767X
Volume 07 Issue 6
June 2019

It is evident from Table 2 that the obtained‘t’ value is 2.333. It is higher than the critical value of 1.645 for df of 198 at 0.05 level. It is significant. Hence the hypothesis stated as “there is no significant difference in the mobile technology competency among high school students in terms of gender”is rejected. The mean value of high school girls on mobile technology competency is 35.16. It is higher than the mean value of high school boys on mobile technology competency that is 33.13. It is inferred from the above that the mobile technology competency of high school girls is better compared to mobile technology competency of high school boys.

It may be concluded from the above table that there is significant difference in the mobile technology competency among high school students in terms of gender. The mobile competency of high school girls is better compared to the mobile technology competency of high school boys.

FIGURE 2: BAR DIAGRAM SHOWING THE SIGNIFICANT DIFFERENCE IN MOBILE TECHNOLOGY COMPETENCY OF HIGH SCHOOL STUDENTS IN TERMS OF GENDER.

ISSN: 2235-767X
Volume 07 Issue 6
June 2019



HYPOTHESIS: 3

There is no significant difference in the mobile technology competency among high school students in terms of residential area.

TABLE 3: MEAN, S.D. AND 't' VALUE FOR MOBILE TECHNOLOGY COMPETENCY AMONG HIGH SCHOOL STUDENTS IN TERMS OF RESIDENTIAL AREA

Residential Area	N	Mean	S.D	't'	Critical Value	Level of Significance
Urban	76	36.18	12.46	2.442	1.645for df of 198 at 0.05 level	Significant
Rural	124	37.09	11.34			

It is evident from Table 3 that the obtained't' value is 2.442. It is higher than the critical value of 1.645for df of 198 at 0.05 level. It is significant. Hence

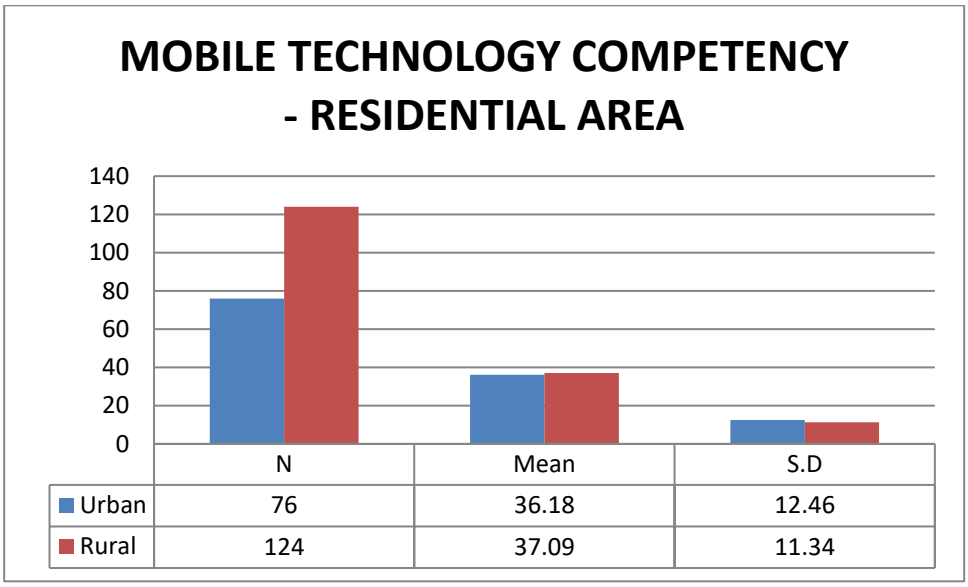
ISSN: 2235-767X
Volume 07 Issue 6
June 2019

the hypothesis stated as “there is no significant difference in the mobile technology competency among high school students in terms of residential area” is rejected. The mean value of rural high school students on mobile technology competency is 37.09. It is higher than the mean value of urban high school students on mobile technology competency that is 36.18. It is inferred from the above that the mobile technology competency of rural high school students is better compared to mobile technology competency of urban high school students.

It may be concluded from the above table that there is significant difference in the mobile technology competency among high school students in terms of residential area. The mobile competency of rural high school students is better compared to the mobile technology competency of urban high school students.

FIGURE 3: BAR DIAGRAM SHOWING THE SIGNIFICANT DIFFERENCE IN MOBILE TECHNOLOGY COMPETENCY OF HIGH SCHOOL STUDENTS IN TERMS OF RESIDENTIAL AREA

ISSN: 2235-767X
Volume 07 Issue 6
June 2019



FINDINGS

1. The level of mobile technology competency among high school students is high.
2. There is significant difference in the mobile technology competency among high school students in terms of gender. The mobile competency of high school girls is better compared to the mobile technology competency of high school boys.
3. There is significant difference in the mobile technology competency among high school students in terms of residential area. The mobile competency of rural high school students is better compared to the mobile technology competency of urban high school students.

CONCLUSION

ISSN: 2235-767X
Volume 07 Issue 6
June 2019

It is concluded from the above findings that the high school students are having mobile technology competency at high level. The variables gender and residential area influence the mobile technology competency of high school students. The high school girls have better mobile technology competency than high school boys. The rural high school students do have more mobile technology competency than urban high school students.

EDUCATIONAL IMPLICATIONS

The study has brought out an important finding that the mobile technology competency of high school students is high. It is in tune with the general notion that the mobile technology competency is gaining ground among young generation more than old generation people. More and more apps on mobile come every day to change the teaching-learning process.

Differential studies give us an implication that mobile technology competency among girls is better than boys. Surprisingly, the rural students do score more on their mobile technology competency compared with their counterparts that is urban students. It is to be studied deeply. How come the girls are better in mobile technology competency than boys? How come the rural students are better in mobile technology competency than urban students? It seems that technology do not see any differences in terms of rural or urban. Hence, the present findings show that rural students are better in mobile technology competency than urban students. The present findings are just a reflection of what goes on among the present society on mobile technology competency.

REFERENCES:

ISSN: 2235-767X
Volume 07 Issue 6
June 2019

- ✓ Best, John and Kahn, James V(1992) "Research in Education" (Sixth Edition), Prentice – Hall of India Pvt.Ltd., New Delhi.
- ✓ Golden, S. A. R. (2017). Attitude of Students and Teachers towards E-Learning-An Analysis. *Recent Research in Social Science & Humanities*, *1*, 5-10.
- ✓ Golden, S. A. R. (2017). *Recent Research in Social Sciences & Humanities*. EduPedia Publications (P) Ltd.
- ✓ Regi, S. B., & Golden, S. A. R. (2014). A Study on Educational Loan Availed By Students in Trichy City. *Journal of International Academic Research for Multidisciplinary (Jiarm)*, *2*(1).
- ✓ Fendelman, Adam (2017-12-18). "1G, 2G, 3G, 4G, & 5G Explained".
- ✓ Cassavoy, Liane (2017-12-18). "What is 4G wireless?".

WEB REFERENCES:

- ➢ http://www.strategicgrowthconcepts.com/growth/increase-productivity--profitability/mobile-technology-facts.html - RETRIEVED ON 31.03.2019 AT 7.00 P.M
- ➢ https://www.finextra.com/blogposting/14000/mobile-technology-its-importance-present-and-future-trends - RETIEVED ON 31.03.2019. AT 7.00 P.M
- ➢ https://www.zdnet.com/article/mobile-technology-the-amazing-impact-on-our-lives/
- ➢ RETRIEVED ON 31.03.2019 AT 7.00 P.M

- ➢ http://government-2020.dupress.com/driver/mobile-technology/
- ➢ RETRIEVED ON 31.03.2019 AT 7.00 P.M