

# **REVIEW OF RESEARCH**

IMPACT FACTOR : 5.7631(UIF)

UGC APPROVED JOURNAL NO. 48514



VOLUME - 8 | ISSUE - 7 | APRIL - 2019

# COMPETENCY OF TEACHERS TO USE MOBILE TECHNOLOGY AT HIGH SCHOOL LEVEL

Mr. S. Rajesh<sup>1</sup> and Dr. N. Ramakrishnan<sup>2</sup> <sup>1</sup>Research Scholar (Part time) Department of Educational Technology , Tamil Nadu Teachers Education University, Chennai. <sup>2</sup>Professor and Head , Department of Educational

Technology , Tamil Nadu Teachers Education University , Chennai.



ISSN: 2249-894X

### **ABSTRACT:**

Mobile technology, in the form of phones, tablets, and notebooks, is making our lives better than ever before. It does this in many ways, not the least of which is making communications routine. We can be in touch with those we need to reach, whether work-related or personal in nature. We can send important files almost anywhere in the world in seconds so business is addressed when it is critical. We can collaborate with co-workers in real-time no matter how spread out they may be. We can get confirmation or approval of vital decisions on the spot. Mobile technology has changed the way we do business for the better. Mobile technology is spreading its tentacles everywhere. How far it is helpful to the teachers/ is the mute question here. Hence, the present study. The objectives of the study were: to find out the level of mobile technology competency among high school teachers, to find out the significant difference in the mobile technology competency among high school teachers in terms of Gender and to find out the significant difference in the mobile technology competency among high school teachers in terms of marital status. The random sampling method was used for the study. Mobile technology competency test with 60 items were used for the study. The findings of the study are: the high school teachers are having mobile technology competency at average level. The variables gender and marital status do influence the mobile technology competency of high school teachers. The female high school teachers have better mobile technology competency than male teachers. The unmarried high school teachers have more mobile technology competency than married high school teachers.

**KEYWORDS:** Competency, Mobile Technology, Teachers, High School.

#### **INTRODUCTION:**

Mobile technology is vastly and rapidly hovered over every arena in the world. Mobile devices are inseparable items in everybody's pocket starting from poor milk vendor to high class corporate people. Mobile technology is exactly what the name indicates – technology that is portable; it refers to any device that you can carry with you to perform a wide variety of "tasks". It is technology that allows those tasks to be performed via cellular phone, PDA, vehicles, laptops, etc. A standard mobile device has gone from being no more than a simple two-way pager to being a cellular phone, a GPS navigation system, a web browser, and instant messenger system, a video gaming system, and much more. It includes the use of a variety of transmission media such as: radio wave, microwave, infra-red, GPS and Bluetooth to allow for the transfer of data via voice, text, video, 2-dimensional barcodes and more.

Mobile technology was a mystery two decades ago but now, it has become something of necessity to both the rural and the urban areas. The mobile technology started as a remarkable achievement in the world of technology but now, it is transforming into user comfort technology due to its present diverse functionality. When the mobile was first introduced, it used to be basically for SMS, Calls and games. But it has presently transformed into a digital world and has made life and business much easier; marketers now have the ability to sell their products with ease through mobiles technology. The mobile has made it possible for users to transfer files and other files through Bluetooth and wifi. The mobile is also equipped with internet connectivity, making it easy for the user to gain information and also to download files from the internet. Video call conferencing is another achievement that has come to reality through mobile technology. Business men and clients now have the channel to communicate even without seeing in person. With the use of mobile technology, it is now easy to catch up with every form of entertainment from the comfort of your home. It has also made it possible for one to easily locate places on the globe using the Global positioning system (GPS). Especially in the business world, the importance of mobile technology cannot be overemphasized; bankers depend solely on mobile technology on managing finances and stocks. Many business firms uses the mobile technology to increase their earnings through providing customers easiness to patronize their product through apps and websites. For example, the Cinema may create an app for ticket booking; railway travel tickets can be purchased from the internet without having to queue up to purchase it. The evolvement of mobile technology has made our life easier and also saves us

#### **NEED FOR THE STUDY**

Mobile technology, in the form of phones, tablets, and notebooks, is making our lives better than ever before. It does this in many ways, not the least of which is making communications routine. We can be in touch with those we need to reach, whether work-related or personal in nature. We can send important files almost anywhere in the world in seconds so business is addressed when it is critical. We can collaborate with co-workers in real-time no matter how spread out they may be. We can get confirmation or approval of vital decisions on the spot. Mobile technology has changed the way we do business for the better.

Since the arrival of the mobile, it has helped humans in many ways; some of which are: mobile phones are very important in case of an emergency they safe lives in cases of accidents and other related issues. One of the most important use of smart phones is that they ensure safety. Families can easily communicate with each other while away. To cap it up, mobile technology is here to stay and holds a lot more features in the future to meet even the most of our basic needs and to make life a lot easier. It is in this context, the investigator being a history student felt the need for conducting a study entitled as "COMPETENCY OF TEACHERS 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. 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 teachers.
- 2. To find out the significant difference in the mobile technology competency among high school teachers in terms of Gender.
- 3. To find out the significant difference in the mobile technology competency among high school teachers in terms of marital status.

#### HYPOTHESES FORMULATED FOR THE STUDY

The hypotheses stated are as follows:

- 1. The level of mobile technology competency among high school teachers is average.
- 2. There is no significant difference in the mobile technology competency among high school teachers in terms of Gender.
- 3. There is no significant difference in the mobile technology competency among high school teachers in terms of marital status.

#### **INSTRUMENTATION**

The investigator used the mobile technology competency test prepared and validated by the investigator. There are 60 multiple choice items in the test. Each item is having a value of 1 mark. Thus total marks would be 60.

#### **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:**

The test was administrated among the 40 high school teachers in Cuddaloreas a try out and readministrated among the same 40 high school teachers after 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 0.92. It is high correlation. Hence, it is assumed that the test has reliability.

#### **SCORING:**

The scores for all the 60 items were counted. Master table was prepared.

#### **SAMPLE DESIGN**

The investigator has followed random sampling method for the present study. The investigator has collected a sample of 100 high school teachers in Cuddalore district.

# ANALYSIS

Hypothesis 1.

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

# TABLE 4.1.DESCRIPTIVE ANALYSIS FOR THE MOBILE TECHNOLOGY COMPETENCY AMONG HIGH SCHOOL TEACHERS.

S.No	Description	Value
1.	Mean	35.34
2.	Standard Deviation	14.215
3.	Low Score	11
4.	Highest Score	39
5.	Mode	36
6.	Median	34
7.	Theoretical Mean	30

It is evident from Table 1 that the median and mode values for the mobile technology competency among high school teachers are 34 and 36 respectively. The highest score is 39and the lowest score is 11. The mean value obtained is 35.34 with standard deviation of 14.215. It is slightly

nearer to the theoretical mean of 30. It is proved from the above table that the high school teachers are having mobile technology competency at average level. So, the hypothesis stated as "the level of mobile technology competency among high school teachers is average" is accepted.

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





#### **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**

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

#### **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 teachers in terms of Gender.

SCHOOL TEACHERS IN TERMS OF GENDER									
Gender	N	Mean	S.D	'ť'	Critical Value	Level of Significance			
Male	16	34.17	12.84	2.199	1.661 for df of 98 at	Significant			
Female	84	36.08	11.73		0.05 level				

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

It is evident from Table 2 that the obtained't' value is 2.199. It is higher than the critical value of 1.661 for df of 98 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 teachers in terms of gender" is rejected. The mean value of female high school teachers on mobile technology competency is 36.08. It is higher than the mean value of male high school teachers on mobile technology competency that is 34.17. It is inferred from the above that the mobile technology competency of female high school teachers is better compared to mobile technology competency of male high school teachers.

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

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



# **HYPOTHESIS: 3**

There is no significant difference in the mobile technology competency among high school teachers in terms of marital status.

# TABLE 3: MEAN, S.D. AND 't' VALUE FOR MOBILE TECHNOLOGY COMPETENCY AMONG HIGH SCHOOL TEACHERS IN TERMS OF MARITAL STATUS

Marital Status	N	Mean	S.D	'ť'	Critical Value	Level of Significance
Married	36	37.17	11.45	3.188	1.661 for df of 98 at	Significant
Unmarried	64	38.08	12.23		0.05 level	

It is evident from Table 3 that the obtained't' value is 3.188. It is higher than the critical value of 1.661 for df of 98 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 teachers in terms of marital status" is rejected. The mean value of unmarried high school teachers on mobile technology competency is 38.08. It is higher than the mean value of married high school teachers on mobile technology competency of unmarried high school teachers is better compared to mobile technology competency of married high school teachers.

It may be concluded from the above table that there is significant difference in the mobile technology competency among high school teachers in terms of marital status. The mobile competency of unmarried high school teachers is better compared to the mobile technology competency of married high school teachers.

# FIGURE 3: BAR DIAGRAM SHOWING THE SIGNIFICANT DIFFERENCE IN MOBILE TECHNOLOGY COMPETENCY OF HIGH SCHOOL TEACHERS IN TERMS OF MARITAL STATUS.



#### **FINDINGS**

- 1. The level of mobile technology competency among high school teachers is average.
- 2. There is significant difference in the mobile technology competency among high school teachers in terms of gender. The mobile competency of female high school teachers is better compared to the mobile technology competency of male high school teachers.
- 3. There is significant difference in the mobile technology competency among high school teachers in terms of marital status. The mobile competency of unmarried high school teachers is better compared to the mobile technology competency of married high school teachers.

#### CONCLUSION

It is concluded from the above findings that the high school teachers are having mobile technology competency at average level. The variables gender and marital status do influence the mobile technology competency of high school teachers. The female high school teachers have better mobile technology competency than male teachers. The unmarried high school teachers have more mobile technology competency than married high school teachers.

#### **EDUCATIONAL IMPLICATIONS**

The study has brought out an important finding that the mobile technology competency of high school teachers is average. It is in agreement with the general trend that the mobile technology competency is gaining ground among teachers slowly. It is to be noted that in future the mobile technology competency of teachers will be more.

Further it is to be noted from the differential studies that the personal variables gender and marital status do influence the mobile technology competency. The female teachers are adept in mobile technology competency than their counterparts. It is to be studied deeply. How come the female teachers are good in mobile technology competency? The unmarried high school teachers are good in mobile technology competency. It may be due to the reason that the unmarried high school teachers must be young. So they are good in mobile technology competency. The general trend is younger generation is more technology savvy than aged people. It has reflected in this study.

#### **REFERENCES:**

Best, John and Kahn, James V(1992) "Research in Education" (Sixth Edition), Prentice – Hall of India Pvt.Ltd., New Delhi.

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/mobiletechnology-facts.html - RETRIEVED ON 31.03.2019 AT 7.00 P.M https://www.finextra.com/blogposting/14000/mobile-technology-its-importance-present-and-futuretrends - 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