

KNOWLEDGE AND SKILLS IN MOBILE PHOTOGRAPHY AMONG HIGHER SECONDARY BOTANY STUDENTS

Mr. R.DHAMOTHARAN

Research Scholar (FullTime) 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

It is rare to see a student without mobile phone. The use of mobile phone is on the increase among students. We could witness students glued to mobile phones all the time. It has occupied a personal space in their life. It has become all in all in their daily activities. The varied things in it have made them pass their valuable time with it. The higher secondary botany curriculum requires botany students to make projects on plants. The mobile photography will give a wider chance for them to make many interesting photos and videos. It will help them to record real time happening in plants. It will also give picture perfect clarity in studying plants and other varieties. So, this study has been undertaken by the investigator. The objectives of the study are to find out the level of knowledge and skills in mobile photography among higher secondary botany students and to find out the significant difference in knowledge and skills in mobile photography among higher secondary botany students in terms of gender and medium of instruction. The investigator used the knowledge and skills in mobile photography test for students 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 250 higher secondary botany students in Dharmapuridistrict. The findings of the study reveal that the level of knowledge and skills on mobile photography among higher secondary botany students is high. There exist significant difference in the knowledge and skills in mobile photography among higher secondary botany students in terms of gender and medium of instruction.

KEY WORDS: KNOWLEDGE, SKILLS, MOBILE PHOTOGRAPHY, BOTANY, HIGHER SECONDARY LEVEL

NEED FOR THE STUDY

It is rare to see a student without mobile phone. The use of mobile phone is on the increase among students. We could witness students glued to mobile phones all the time. It has occupied a personal space in their life.

It has become all in all in their daily activities. The varied things in it have made them pass their valuable time with it. The pandemic situation has made everyone to have compulsory mobile phone for their

online learning. They spend their valuable time by taking selfies and photos of important day today events. It is quite obvious that students often browse through internet and other sources for latest configuration of mobile cameras. They do create a lot of videos. Many of them act as you tubers and create videos for many applications. They do take many interesting photos and upload them in the social networks. Such an act should turn towards subject content also. Especially the botany students should make use of such advancement in mobile photography for learning botany subject. It will give many vivid experiences. It will create enthusiasm and scientific temper among botany students.

The higher secondary botany curriculum requires botany students to make projects on plants. The mobile photography will give a wider chance for them to make many interesting photos and videos. It will help them to record real time happening in plants. It will also give picture perfect clarity in studying plants and other varieties. Having seen the benefits of mobile photography, it has become the natural quest of the investigator to explore under the title "KNOWLEDGE AND SKILLS IN MOBILE PHOTOGRAPHY AMONG HIGHER SECONDARY BOTANY STUDENTS".

TERMS AND DEFINITIONS

Knowledge – refers to information, understanding that you have gained through learning. Here it refers to information and understanding about mobile photography.

Skills - refers to the ability to do something. Here it refers to the ability to take mobile photos by way of answering mobile technology skills related questions.

Mobile Photography- refers to the art, application and practice of creating images by recording light through mobile phone electronically.

Higher Secondary botany students - refers to students who have taken up botany as one of the subjects at the level of senior secondary or 11th and 12 standards in 10+2+3 system of education in India.

OBJECTIVES OF THE STUDY

The study has formulated the following objectives:

1. To find out the level of knowledge and skills in mobile photography among higher secondary botany students.
2. To find out the significant difference in knowledge and skills in mobile photography among higher secondary botany students in terms of gender.
3. To find out the significant difference in knowledge and skills in mobile photography among higher secondary botany students in terms of medium of instruction.

HYPOTHESES FORMULATED FOR THE STUDY

The hypotheses stated are as follows:

1. The level of knowledge and skills in mobile photography among higher secondary botany students is average.
2. There is no significant difference in knowledge and skills in mobile photography among higher secondary botany students in terms of gender.
3. There is no significant difference in knowledge and skills in mobile photography among higher secondary botany students in terms of medium of instruction.

INSTRUMENTATION

The investigator used a test on knowledge and skills in mobile photography for students. The test on knowledge and skill in mobile photography was prepared and validated by the investigator. There are 37 multiple choice items in the test. Each item is having a value of 1 mark. Thus total marks would be 37.

ESTABLISHING VALIDITY OF THE TOOL:

The investigator has consulted experts in the field of Information technology to check the content in the test on knowledge and skills in mobile photography and its suitability to local awareness on mobile photography

specifications to students. 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 administered among the 50 higher secondary botany students in Dharmapuri as a try out and re-administered among the same 50 higher secondary botany students after a gap of 20 days. Karl Pearson's 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 0.91. It is high correlation. Hence, it is assumed that the test has reliability coefficient.

SCORING:

The scores for all the 37 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 250 higher secondary botany students in Dharmapuri district. .

ANALYSIS

Hypothesis 1.

The level of knowledge and skills in mobile photography among higher secondary botany students is average.

TABLE 1. DESCRIPTIVE ANALYSIS FOR THE KNOWLEDGE AND SKILLS IN MOBILE PHOTOGRAPHY AMONG HIGHER SECONDARY BOTANY STUDENTS

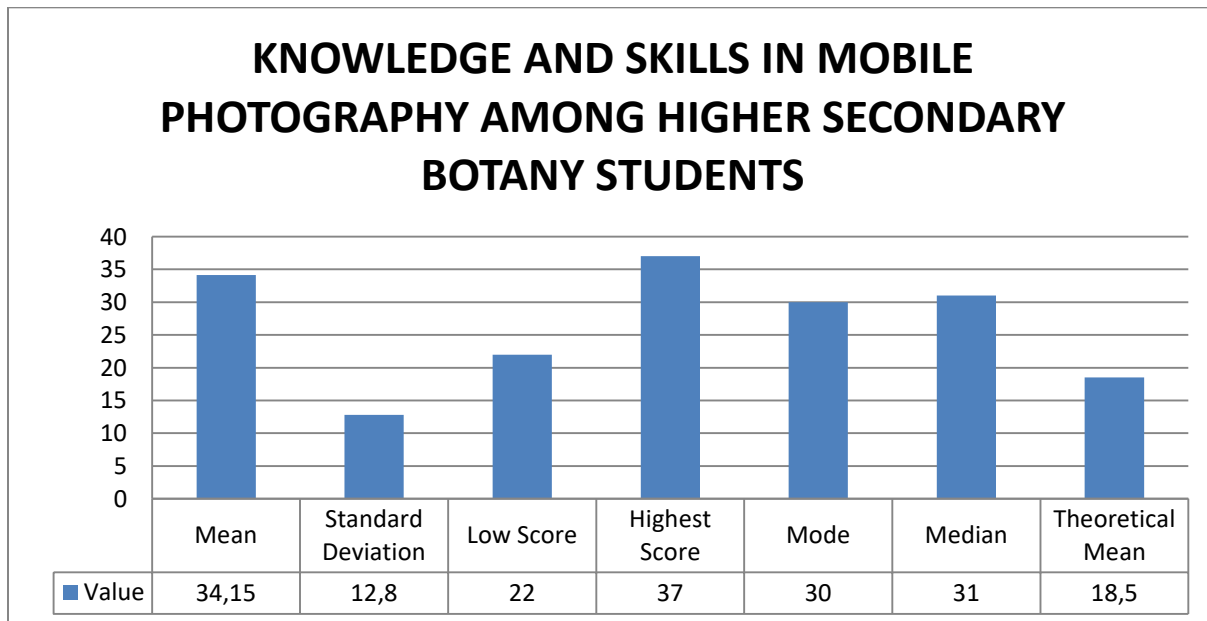
S.No	Description	Value
1.	Mean	34.15
2.	Standard Deviation	12.8
3.	Low Score	22
4.	Highest Score	37
5.	Mode	30
6.	Median	31
7.	Theoretical Mean	18.5

It is evident from Table 1 that the median and mode values for the knowledge and skills in mobile photography among higher secondary botany students are 31 and 30 respectively. The highest score is 37 and the lowest score is 22. The mean value obtained is 34.15 with standard deviation of 12.8. It is well above the theoretical mean of 18.5. It is proved from the above table that the higher secondary botany students are

having knowledge and skills on mobile photography at high level. So, the hypothesis stated as “the level of knowledge and skills on mobile photography among higher secondary botany students is average” is rejected.

It may be concluded from the above that the level of knowledge and skills in mobile photography among higher secondary botany students is high.

FIGURE 1: BAR DIAGRAM SHOWING KNOWLEDGE AND SKILLS IN MOBILE PHOTOGRAPHY AMONG HIGHER SECONDARY BOTANY 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

The dependent variable knowledge and skills on mobile photography among higher secondary botany students in terms of various subgroups of the sample is presented

here. The subgroups selected for the study were gender and medium of instruction.

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 knowledge and skills in mobile photography among higher secondary botany students in terms of gender.

TABLE 2: MEAN, S.D. AND 't' VALUE FOR KNOWLEDGE AND SKILLS IN MOBILE PHOTOGRAPHY AMONG HIGHER SECONDARY BOTANY STUDENTS IN TERMS OF GENDER

Gender	N	Mean	S.D	't'	Critical Value	Level of Significance
Boys	136	33.13	13.76	2.313	1.980 for df of 240 at 0.05 level	Significant
Girls	114	31.16	12.82			

It is evident from Table 2 that the obtained 't' value is 2.313. It is higher than the critical value of 1.980 for df of 248 at 0.05 level. It is significant. Hence the hypothesis stated as "there is no significant difference in the knowledge and skills in mobile photography among higher secondary botany students in terms of gender" is rejected. The mean value of higher secondary boys studying botany on knowledge and skills in mobile photography is 33.13. It is higher than the

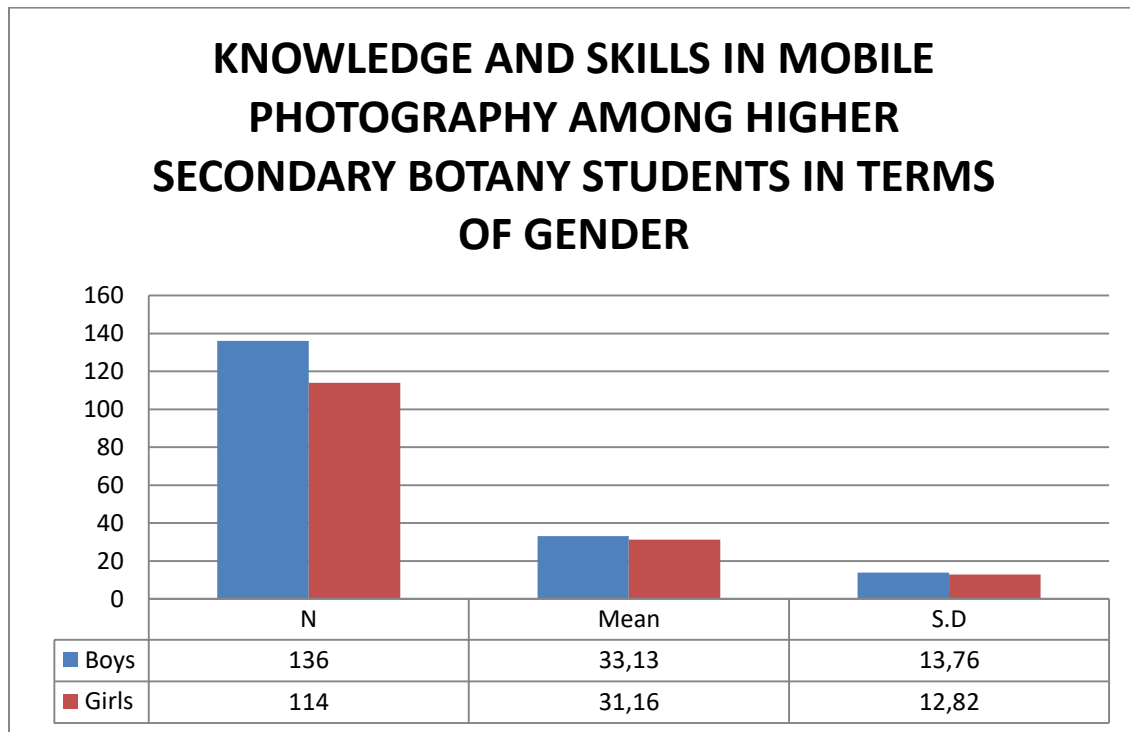
mean value of higher secondary girls studying botany on knowledge and skills in mobile photography that is 31.16. It is inferred from the above that the higher secondary boys studying botany on knowledge and skills in mobile photography is better compared to higher secondary girls studying botany on knowledge and skills in immobile photography.

It may be concluded from the above table that there is a significant difference in the knowledge and skills in immobile

photography among higher secondary botany students in terms of gender. The level of knowledge and skills in mobile photography among higher secondary boys

studying botany is better compared to the knowledge and skills in mobile photography among higher secondary girls studying botany

FIGURE 2: BAR DIAGRAM SHOWING THE SIGNIFICANT DIFFERENCE IN KNOWLEDGE AND SKILLS IN MOBILE PHOTOGRAPHY AMONG HIGHER SECONDARY BOTANY STUDENTS IN TERMS OF GENDER.



HYPOTHESIS: 3

There is no significant difference in knowledge and skills in mobile photography among higher secondary botany students in terms of medium of instruction.

TABLE 3: MEAN, S.D. AND 't' VALUE FOR KNOWLEDGE AND SKILLS IN MOBILE PHOTOGRAPHY AMONG HIGHER SECONDARY STUDENTS IN TERMS OF MEDIUM OF INSTRUCTION

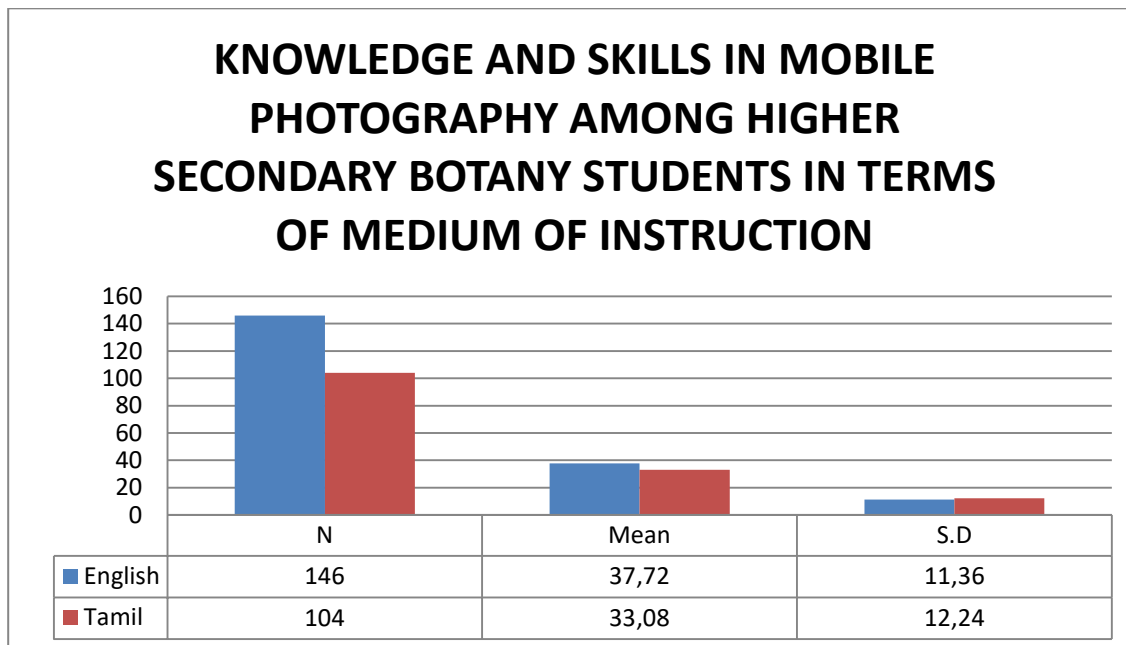
Medium of Instruction	N	Mean	S.D	't'	Critical Value	Level of Significance
English	146	37.72	11.36	2.224	1.980for df of 248 at 0.05 level	Significant
Tamil	104	33.08	12.24			

It is evident from Table 3 that the obtained 't' value is 2.224. It is higher than the critical value of 1.980 for df of 248 at 0.05 level. It is significant. Hence the hypothesis stated as "there is no significant difference in the knowledge and skills in mobile photography among higher secondary botany students in terms of medium of instruction" is rejected. The mean value on knowledge and skills in mobile photography among higher secondary botany students studying in English medium is 37.72. It is higher than the mean value on knowledge and skills in mobile photography among higher secondary botany students studying in Tamil medium which is 33.08. It is inferred from the above that the knowledge and skills in

mobile photography among higher secondary botany students studying in English medium is better compared to the knowledge and skills in mobile photography among higher secondary botany students studying in Tamil medium.

It may be concluded from the above table that there is a significant difference on the knowledge and skills in mobile photography among higher secondary botany students in terms of medium of instruction. The level of knowledge and skills in mobile photography is better among higher secondary botany students studying in English medium compared to the knowledge and skills in mobile photography among higher secondary botany students studying in Tamil medium.

FIGURE 3: BAR DIAGRAM SHOWING THE SIGNIFICANT DIFFERENCE IN KNOWLEDGE AND SKILLS IN MOBILE PHOTOGRAPHY AMONG HIGHER SECONDARY BOTANY STUDENTS IN TERMS OF MEDIUM OF INSTRUCTION



FINDINGS

1. The level of knowledge and skills in mobile photography among higher secondary botany students is high.
2. There is a significant difference in the knowledge and skills in mobile photography among higher secondary botany students in terms of gender. The level of knowledge and skills in mobile photography among higher secondary boys studying botany is better compared to the knowledge and skills in mobile photography among higher secondary girls studying botany.
3. There is a significant difference on the knowledge and skills in mobile photography among higher secondary botany students in terms of medium of instruction. The level of knowledge and skills in mobile photography is better among higher secondary botany students studying in English medium compared to the knowledge and skills in mobile photography among higher secondary botany students studying in Tamil medium.

CONCLUSION

It is concluded from the above findings that the higher secondary botanystudents are having knowledge and skills in mobile photography at high level. The variables gender and medium of instruction influence the knowledge and skills in mobile photography of higher

secondary botany students. The higher secondary boys studying botany are having better knowledge and skills in mobile photography than higher secondary girls studying botany. The higher secondary botany students studying in English medium do have more knowledge and skills in mobile photography than higher secondary botany students studying in Tamil medium.

EDUCATIONAL IMPLICATIONS

The study has brought out an important finding that the knowledge and skills in mobile photography of higher secondary botany students is high. Generally students are well versed in mobile technology. So, this finding is in tune with the general trend.

Differential studies show us an impetus that knowledge and skills in mobile photography among higher secondary boys studying botany is fairly good. It is in agreement with the common notion that boys are well exposed to mobile gadgets than girls. This has reflected in this study. The higher secondary botany students studying in English medium are more knowledgeable and skillful in mobile photography. It may be due to the knowledge in foreign language that is English. All the mobile gadgets are coming with a lot of inputs in English. This may be true according to the prevalent English advertisements on mobile phones with cameras.

REFERENCES

- Henry Carroll (2014) "Read this if You Want to Take Good Photographs- A super -fun, gentle introduction to photography" Laurence King Publishing; illustrated edition.
- Jim Miotke (2010) " Better Photo Basics: The absolute Beginner's Guide to Taking Photos Like a Pros" Amphoto Books; illustrated edition.
- Robert Fisher (2014) "The Mobile Photographer: An unofficial Guide to Using Android Phones, Tablets, and Apps in a Photography Workflow" Amherst Media, Canada
- Vockell, E.L.,& Asher, J.W.(1995). Educational Research, Englewood Cliffs, NJ:Merrill.