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A STUDY OF THE RELATIONSHIP OF CREATIVITY WITH COMPUTER ANXIETY OF HIGHER SECONDARY STUDENTS

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Abstract:

The purpose of the present study was to investigate the relationship of creativity with computer anxiety of higher secondary students. The sample consisted of 800 higher secondary students of Lucknow district of Uttar Pradesh, India. Divergent production abilities test developed and validated by Dr. K.N. Sharma to measure the creativity and Computer anxiety scale developed and validated by investigator to measure the level of computer anxiety were used. Mean, Percentage and Pearson product moment coefficient correlation were used to analyze the collected data. The findings of this study show that higher secondary students have average level of computer anxiety. Another finding of this study shows that there is very low negative correlation between computer anxiety and creativity of higher secondary students.

Key Words: Creativity, Computer Anxiety & Higher Secondary Students

Introduction:

Computer technology may be helpful to solve many problems by developing creative thinking. Creativity is universal and every person among us possesses creativity to some degree. A creator is that person who is able to make ego-involved statement like- it is my creation, I have solved this problems, it is my ideas etc. In creativity expressions there is fully ego involvement. Creativity is the ability to generate new ideas and new connections between ideas and ways to solve problems in any field. It is essentially found in new construction or production. Creativity means to do something new or innovative.

According to C. V. Good creativity means-"A quality of thought to be composed of broad continue upon which all members of the population may be placed indifferent degrees, the factors of creativity are tentatively described as associate and ideational fluency, originality, adaptive and spontaneous flexibility and ability to make logical evolution."

As we know that the modern age is the age of computer technology and computer plays an important role in our education. With the help of using computers the students can learn more and they can solve their logical problem very easily and enormous speed. The other hand we see that negative attitude may hamper the use of computer as learning. Negative attitude towards computer is also called the computer Anxiety. Computer anxiety also plays an important role. Computer anxiety is concept specific types that regular occur in specific type of situation. Users are afraid that they will break the computer or destroyed vital information. So it is very necessary that how to develop positive attitude towards computer and reduce computer anxiety among the students. There are many factors which affects on computer anxiety as- gender, family facilities, personal computer at home, computer use, computer experience, etc. As we see that every person has some level of computer anxiety and computer anxiety is a variable which can be measured. Most of the people think that computer enhances the creativity. They tend to focus on the variety of excellent idea generation packages that are now in the market. But other hand we see that computer anxiety also affects on creativity. Is it really true or not? That is why the investigator has decided to study the relationship of creativity with computer anxiety of higher secondary students.

Review of Related Literature:

Olufemi, O.A. and Oluwataya, O.J. (2014) conducted a study on "computer anxiety and computer knowledge as determinants of candidate's performance in Computer based Test in Nigeria". The purpose of this study was to investigate the influence of computer anxiety and computer knowledge on candidate's performance in computer based test. The findings of this study showed that computer anxiety and computer knowledge significantly combined to predict performance in computer based test. Computer knowledge is the only significant predictor of performance in computer based test.

Ponnraj, P. and Shivakumar, R. (2014) conducted a study on "Computer anxiety of higher secondary Biology students". The purpose of this study was to investigate the level of computer anxiety of first year higher secondary biology students and to find out the level of computer anxiety of first year higher secondary biology students with reference to gender, locality and use of computer. The results of this study show that first year higher secondary students were having average level of computer anxiety another finding is that there is no significant difference in the computer anxiety of boys and girls. Another finding was that urban higher secondary biology students had more computer anxiety than rural higher secondary biology students. The last

finding was that the higher secondary biology students who use computer had more level of computer anxiety than the students who do not use computer.

Tuncer, M., Dogan, Y. and Tanas, R. (2013) conducted a study on "Investigation of vocational high school students' computer anxiety". The purpose of this study was to investigate the vocational high school students' computer anxiety in terms of gender, type of education, grade, experience of computer education and having a computer. From this study it was make any meaningful difference for the computer anxiety while type of education received, receiving computer education, grade and having a computer may mean meaningful difference in terms of various sub factors and the whole scale itself.

Kannan, B., Muthumanickam, A. and Chandrasekaran, S. (2012), conducted a study on "Computer Anxiety among higher secondary students". The purpose of this study was to measure the level of computer anxiety of the higher secondary students and to find out, whether there is a significant difference among higher secondary students in terms of select independent variables in their computer anxiety. The results of this study show that Computer Anxiety of the Higher Secondary School students is below the average level. Another finding of this study shows that Computer Anxiety of the Higher Secondary school students is independent of one's school kind, school system and tuition undergoing. The last finding shows that Computer Anxiety of the Higher Secondary school students is dependent of one's sex, group studying, locality of school, study habit, computer course undergone and browsing habit.

Sharma, R. (2016), conducted a study on "Effect of school and home environments on creativity of children". They found that government school students of Chandigarh city have higher creativity except in elaboration as compared to private school students. The mean scores also show that the girls as compared to boys have higher level of creativity. The significant t-values show that the creative stimulation, cognitive environment dimensions, permissiveness dimensions of school environment effect the creativity of school children to a certain extent. There also exists a significant difference between children of rich and poor home environments on all the dimensions of creativity

Wasake, P. M. (2014) conducted a study on "A comparative study of creativity of male and female senior college students in Chandrapur Taluka reference to their achievement". The objective of this study was to compare the creativity level of male and female senior college students with respect to their achievement. The results of this study showed that there was no significant difference between the low achiever male and female senior college students with regard to creativity. Another finding showed that there was no significant difference between the creativity level of male and female senior college students with respect to high achievement.

Dhall, S. (2012) conducted a study on "A study of creativity in relation to reaction to frustration and academic achievement of secondary school". The purpose of this study was to find out the relationship of creativity, reaction to frustration and academic achievement of higher secondary schools students. The results showed that reaction to frustration is related positively with creativity for secondary schools students, such relationship does not exist in case of boys and girls taken separately. Further no significant relationship found between creativity and academic achievement and the last finding of this study showed that a significant positive relationship was found between reaction to frustration and academic achievement of secondary schools.

Objectives of the Study:

- ✓ To measure the level of computer anxiety of higher secondary students.
- ✓ To observe the relationship between creativity and computer anxiety among higher secondary students.

Hypotheses of the Study:

- ✓ Higher secondary students have average level of computer anxiety.
- ✓ There is no significant relationship between creativity and computer anxiety among higher secondary students.

Population of the Study:

The population of present study constitutes all the higher secondary students including science and art stream in different higher secondary schools of Lucknow district of Uttar Pradesh, India.

Sample of the Study:

The sample for the study was selected through Random Sampling Method. Total 800 higher secondary students of Lucknow district in Uttar Pradesh representing science and art stream were considered.

Tool Used:

In the present study the investigator has used two scales in order to realize aforesaid objectives and hypotheses. The measuring tools are as below:

- ✓ Divergent Production Abilities test developed and validated by Dr. K. N. Sharma.
- ✓ Computer anxiety scale developed and validated by the investigator. It is of the Likert type having 28 statements 15 of them are positively worded and the remaining 13 are negative worded. The scores in the computer anxiety scale range 28 to 140. The reliability of the tool was found to be 0.94. The items in the tool were selected after the judgment of subject specialists and computer teacher. Thus the tool possesses content validity.

Statistical Techniques:

Percentage, Mean and Pearson product moment coefficient correlation were used to analyze the data.

Analysis and Interpretation of Data:

Hypothesis 1: Higher secondary students have average level of computer anxiety.

Table 1.1: Frequency distribution of computer anxiety scores of higher secondary students

S.No	Percentage of Computer Anxiety Score	Categories	Frequency	% of the Students
1	81 to above	Extremely high	0	0 %
2	66 to 80	High	52	6.5 %
3	55 to 65	Above average	325	40.63 %
4	49 to 54	Average	154	19.2.5 %
5	38 to 48	Below Average	210	26.25 %
6	30 to 37	Low	51	6.375 %
7	29 to below	Extremely Low	8	1 %
Total			800	100

Graph 1

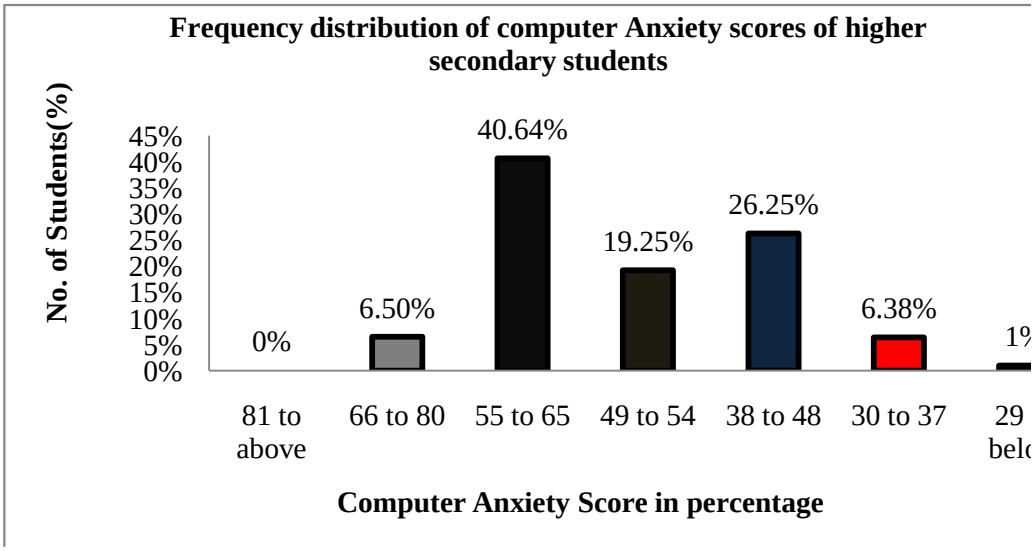

Table 1.2: Table for mean score and percentage of mean score of higher secondary students towards computer anxiety

No. of Students	Mean Score	Percentage of Mean Score	Categories
800	74.04	52.89 %	Average

The above table 1.1 shows that 6.5 % students scored between 66% and 80%, about 40.63% students scored between 55% and 65%, about 19.25% students scored between 49% and 54%, about 26.25% students scored between 38% and 48% and about 6.36% students scored between 30% and 37% about 1% students scored between 29% and below. As per norms if the students scored above 49%, they are considered to possess average level of computer anxiety.

It is clearly visible from the table **1.2** that percentage of mean score of the higher secondary students towards computer anxiety is 52.89 % which is average level of computer anxiety. Concluding we can say that all the students of higher secondary showed average level of computer anxiety. So the hypothesis no.1 is accepted.

Hypothesis 2: There is no significant relationship between creativity and computer anxiety among higher secondary students.

Table 2: Table for the correlation between creativity and computer anxiety of higher secondary students

Variables	Higher Secondary Students				
	N	df	Calculated 'r' Value at df = 798	Table Value at df=798	Level of Significance
Creativity vs Computer anxiety	800	798	-0.1	r.05 = 0.08 r.01 = 0.11	Significant at 0.05

The table 2 shows that the correlation coefficient of creativity and computer anxiety is -0.1 which is significant at 0.05 level of significant with df = 798. So the hypothesis no.2 is rejected. So there is significant

relationship between creativity and computer anxiety of higher secondary students. We can also say that it was very low negative correlation.

Discussion of the Result:

The finding of this study revealed that higher secondary students have average level of computer anxiety. The percentage of mean score of the higher secondary students towards computer anxiety is 52.89% which is average level of computer anxiety as per norm. So the higher secondary students need to overcome their level of computer anxiety. On the other hand Kanan, B., Muthumanickam, A. and Chandrasekaran, S. (2102) found in his study that computer anxiety of higher secondary school students was below the average level. The difference in the result may be due to time factor, location and computer experience.

Another finding of this study revealed that there is significant negative correlation between creativity and computer anxiety of higher secondary students. Further it is noted that it is very low (-0.1) negative correlation. The negative sign of the coefficient of correlation indicates that if creativity level of higher secondary student increases then the level of computer anxiety of higher secondary student will be decreases and vice versa.

Conclusion:

In the present study the investigator found that higher secondary students have average level of computer anxiety. So it is very necessary that how to reduce their level of computer anxiety. Further it is also found that there is significant negative correlation between creativity and computer anxiety of higher secondary students. After seeing the results it can be concluded that higher secondary students need to overcome their level of computer anxiety. Computer anxiety affects on creativity. So to increase the level of creativity among higher secondary students it is necessary that first of all we reduce the level of computer anxiety among them.

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