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SIGNIFICANT DIFFERENCE IN THE CREATIVITY OF TYPES OF SCHOOL OF HIGHER SECONDARY

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Abstract

To discover the significant difference between two means after a significant ANOVA, the t test must be used. The estimated t value for private and public schools is 3.78, which is higher than the table value (3.78>2.58) at the 0.01 level of significance, as can be seen from table 4.7(c). At a significance level of 0.05, the estimated t value for private and aided schools is 2.81, which is higher than the table value (2.81 > 2.58). Thus, it is obvious that there are important differences between pupils in higher secondary schools who are private, government, private, and receiving financial aid. Because the mean of private upper secondary school students is higher than that of government and aided higher secondary school students, private higher secondary school students are more creative than their public and aided counterparts. The estimated t value for government and aided schools is 0.89, which is less than the table value (0.891.96) at the 0.05 level of significance with df = 530, as shown in table 4.7(c). Therefore, there is little to no creative difference between pupils from public and assisted higher secondary schools.

Additionally, it should be mentioned that pupils from private higher secondary schools outperformed those from public higher secondary schools and received assistance with their inventiveness.

HYPOTHESIS NO. 8

H_8: Higher secondary students have average level of computer anxiety

TABLE 4.8(A): FREQUENCY DISTRIBUTION OF COMPUTER ANXIETY SCORES OF HIGHER SECONDARY STUDENTS

Sr. No.	Percentage of Computer Anxiety Score	Categories	Frequency	% of the Students
1	81% to above	Extremely high	0	0 %
2	66 % to 80 %	High	50	6.25 %
3	55 % to 65 %	Above average	310	38.75 %
4	49 % to 54 %	Average	160	20.0%
5	38 % to 48 %	Below Average	215	26.875%
6	30 % to 37 %	Low	55	6.87 %
7	29 % to below	Extremely Low	10	1.2 %
Total			800	100 %

TABLE 4.8(B): HIGHER SECONDARY STUDENT'S COMPUTER ANXIETY

	N	Minimum	Maximum	Mean	Category
Total Attitude	800	28.74 %	88 %	54.87 %	Average

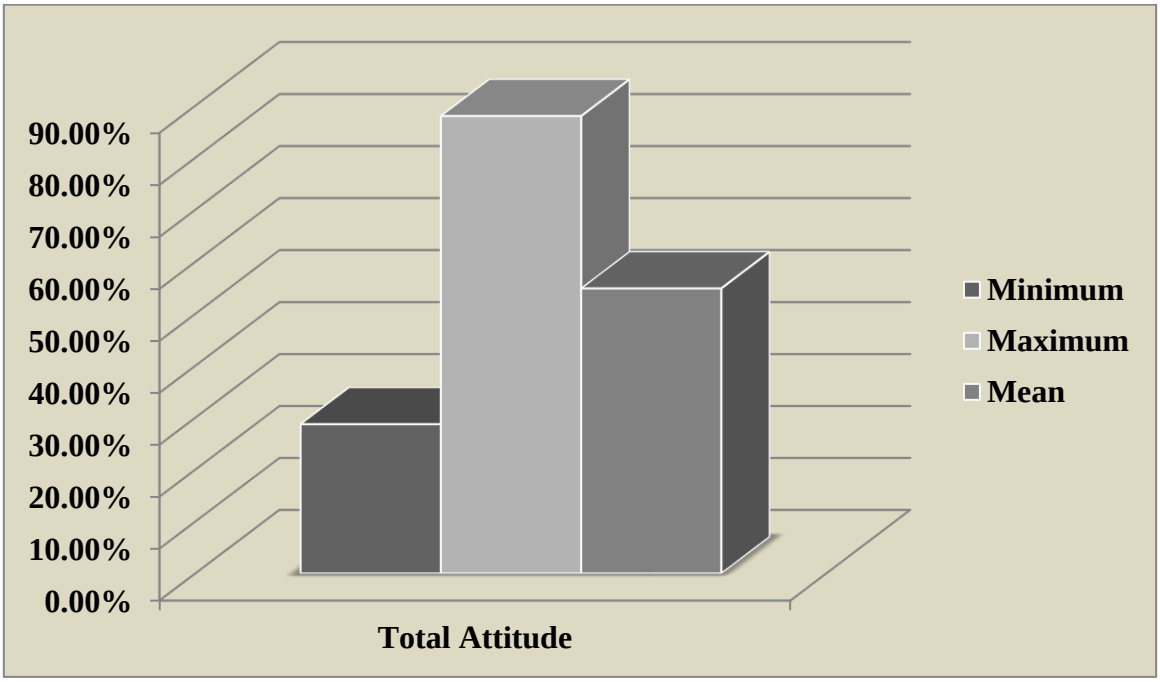

FIGURE- 4.8: HIGHER SECONDARY STUDENT'S COMPUTER ANXIETY

TABLE 4.8(C): SHOWING MEAN SCORE AND PERCENTAGE OF MEAN SCORE OF HIGHER SECONDARY STUDENTSTOWARDS COMPUTER ANXIETY

No. of Students	Mean Score	Percentage of Mean Score	Categories
800	76.06	54.87 %	Average

According to table 4.8(a) above, 6.5 percent of students achieved scores between 66 and 80 percent, 40.63 percent achieved scores between 55 and 65 percent, 20.0 percent achieved scores between 49 and 54 percent, 26.87 percent achieved scores between 38 and 48 percent, and 6.36 percent achieved scores between 30 and 37 percent. Approximately 1.2% of pupils received a score between 29 and below. According to standards, students are judged to have an average level of computer anxiety if they scored over 49 percent.

The percentage of higher secondary students' mean scores toward computer anxiety is 54.87 percent, which is an average level of computer anxiety, as is seen from table 4.8(c). In conclusion, we can claim that all higher secondary pupils displayed an average level of computer phobia. Thus, hypothesis number eight is accepted.

HYPOTHESIS NO. 9

$H0_9$ Gender has no appreciable impact on students in higher secondary schools' computer fear.

The entire sample was split into two groups—males and females—in order to test the aforementioned hypothesis. The t-Test was utilized to determine the gender's substantial influence on higher secondary pupils' computer phobia.

TABLE 4.9: T- TEST FOR SHOWING THE SIGNIFICANT EFFECT OF GENDER ON COMPUTER ANXIETY OF HIGHERSECONDARY STUDENTS

Gender	N	Mean	S.D.	$S.E_D$	t-value	Table value	Significance
Male	410	70.90	12.34	0.95	4.51	t.05=1.94 t.01=2.56	*Significant
Female	390	74.17	10.30				

Significant at 0.01 level of confidence

There are a total of 410 male higher secondary pupils, according to Table 4.9. Male higher secondary pupils' mean and standard deviation are 70.90 and 12.34, respectively. Additionally, it reveals that there are 390 female higher secondary pupils overall. Female higher secondary students' mean and standard deviation are 74.17 and 10.30, respectively.

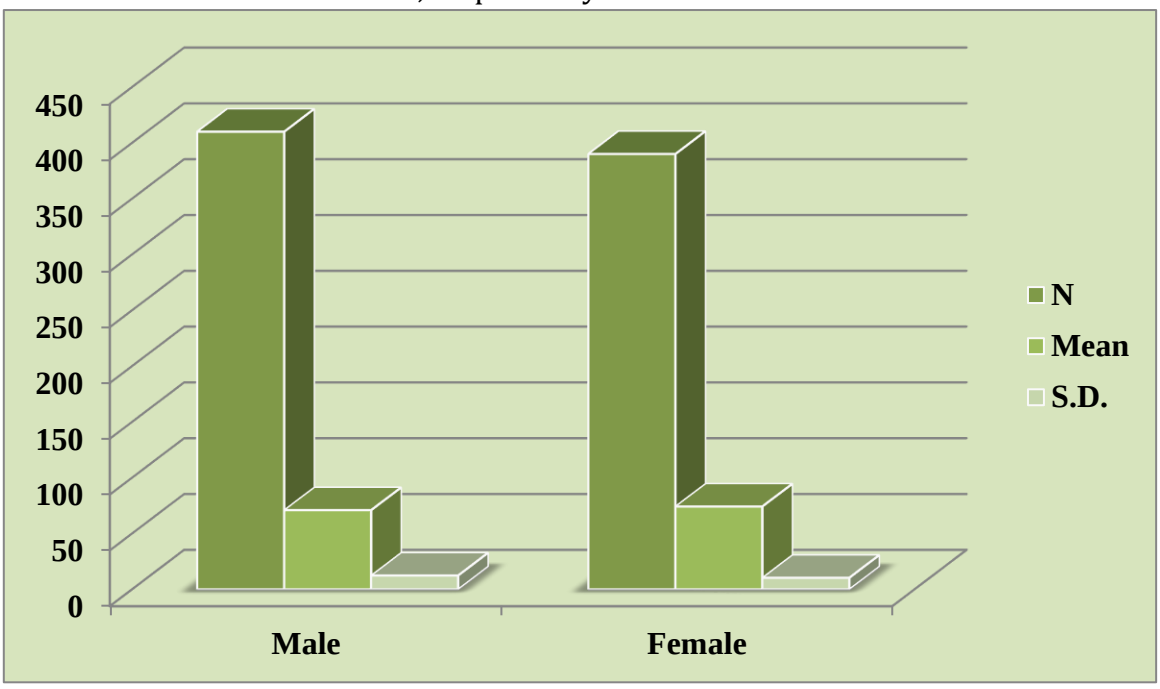

TABLE 4.9: T- TEST FOR SHOWING THE SIGNIFICANT EFFECT OF GENDER ON COMPUTER ANXIETY OF HIGHER SECONDARY STUDENTS

The higher secondary students' t value at the df = 798 is 4.51 for both male and female students. However, the table value at the df = 798 level of 0.01 is 2.56. As a result, at the level of 1, the computed value of t is bigger than the value in the table (4.51 > 2.58).

Therefore, it is evident that there are considerable differences in computer anxiety between male and female higher secondary pupils. Thus, hypothesis number nine is disproved. Male and female higher

secondary students experience computer anxiety at different levels, with female higher secondary students experiencing computer anxiety on average higher than male higher secondary students.
It is also found that higher secondary female students experience more computer phobia than higher secondary male pupils.

HYPOTHESIS NO. 10

$H0_{10}$ Students in higher secondary science and arts streams have similar levels of computer phobia.
The entire sample was split into two categories—science and the arts—in order to evaluate the aforementioned hypothesis. T-test was performed to see whether there was a significant difference between the computer anxiety of pupils in the higher secondary science and arts streams.

TABLE 4.10: T- TEST FOR SHOWING THE SIGNIFICANT DIFFERENCE IN THE COMPUTER ANXIETY OF SCIENCE ANDARTS STREAM STUDENTS OF HIGHER SECONDARY

Stream	N	Mean	S.D.	$S.E_D$	t-value	Table value	Significance
Science	409	66.93	12.61	0.87	11.66	t.05=1.94 t.01=2.56	*Significant
Arts	391	77.27	12.43				

Significant at 0.01 level of confidence

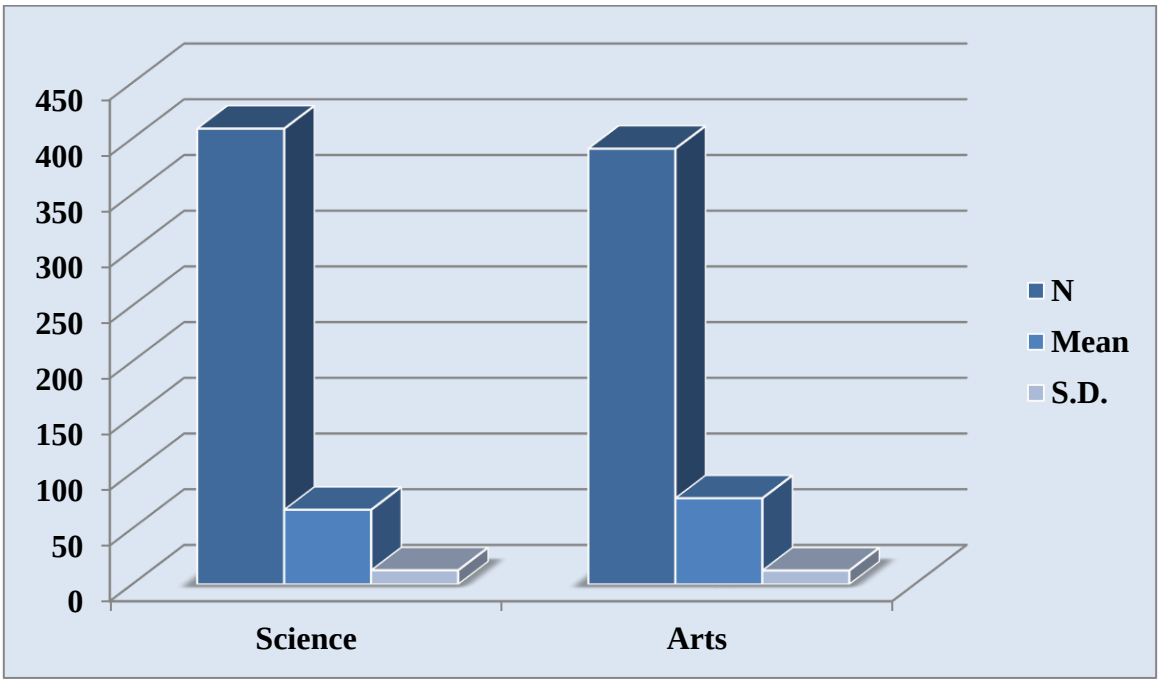

TABLE 4.10: T- TEST FOR SHOWING THE SIGNIFICANT DIFFERENCE IN THE COMPUTER ANXIETY OF SCIENCE AND ARTS STREAM STUDENTS OF HIGHER SECONDARY

There are 409 higher secondary students studying science overall, according to Table 4.10. The higher secondary science students' mean and standard deviation are 66.93 and 12.61, respectively. Additionally, it reveals that 390 higher secondary students are majoring in the arts. The higher secondary pupils' mean and standard deviation are 77.27 and 12.43, respectively. Higher secondary pupils in the Science and Arts streams have a t value of 11.68 at the df = 798. However, the table value at the df = 798 level of 0.01 is 2.58. As a result, at the level of 0.01 the computed value of t is bigger than the value in the table (11.66 > 2.56).

Thus, it is evident that there is a large difference in computer anxiety amongst upper secondary pupils in the arts and sciences. Thus, hypothesis number 10 is disproved. Because Arts higher secondary students' average sensitivity to computer anxiety is higher than that of Science higher secondary students, they have higher levels of computer anxiety than Science higher secondary students do. Additionally, it is found that students in the higher secondary Arts program experience more computer phobia than students in the higher secondary Science program.

HYPOTHESIS NO.11

$H0_{11}$ The levels of computer anxiety in various higher secondary school kinds do not significantly differ from one another.

The entire sample was split into three groups, namely private, government, and aided schools, in order to test the aforementioned hypothesis. F-test was utilized to identify the significant difference between the computer anxiety of various sorts of higher secondary schools.

TABLE 4.11(A): ANOVA (F-TEST) SUMMARY FOR COMPUTER ANXIETY

Types of school	N	Mean	S. D.
Private	268	71.06	16.96
Government	267	72.96	14.72
Aided	265	72.07	11.60

TABLE 4.11(B): ANOVA (F-TEST) FOR SIGNIFICANT DIFFERENCE IN THE COMPUTER ANXIETY OF TYPES OF SCHOOLOF HIGHER SECONDARY

Source of variation	df	SS	MS	F-value	Table value	Significance
Between group	2	477.17	236.57	1.30	F.05 = 3.00 F.01 = 4.61	**Not Significant
Within group	797	146202.42	181.42			
Total	799	146677.62	181.56			

*****Not Significant at 0.05 level of confidence***

The number of higher secondary pupils in Private, Government, and Aided Schools is 268, 267, and 265 accordingly, according to the aforementioned table 4.11(a). Additionally, it reveals that the average score for higher secondary pupils attending private, public, and nonprofit schools is 71.06, 72.96 and 72.07. Table 4.11(b) demonstrates that the calculated f value for students in private, government, and aided higher secondary schools is 1.30, which is lower than the table value of 3.00 at level 0.05 with df = (2,797).

Therefore, at the level of 0.05 and with df =, the calculated value of f is smaller than the table value (1.30 3.00). (2,797).

Therefore, it is evident that there are no appreciable differences in computer anxiety amongst the various types of high school students' schools. Thus, hypothesis number eleven is accepted.

Additionally, it should be highlighted that students in private, public, and aided higher education all have a similar level of computer phobia.

HYPOTHESIS NO.12

$H0_{12}$ Higher secondary pupils' attitudes about computer-based education and creativity do not significantly correlate.

The entire sample was split into two groups depending on attitudes toward computer-based education and creativity in order to test the aforementioned hypothesis. The product moment correlation method was utilized to identify the significant association between higher secondary students' attitudes regarding computer-based education and their creativity.

TABLE 4.12: SHOWING THE CORRELATION BETWEEN ATTITUDE TOWARDS COMPUTER BASED EDUCATION ANDCREATIVITY OF HIGHER SECONDARY STUDENTS

Variables	Higher secondary students				
	N	df	Calculated 'r' Value at df = 796	Table value at df=796	Level of Significance
Attitude towards Computer Based Education	800	796	0.12	r.05=0.06 r.01=0.12	*Significant
Creativity					

Significant at 0.01 level of confidence

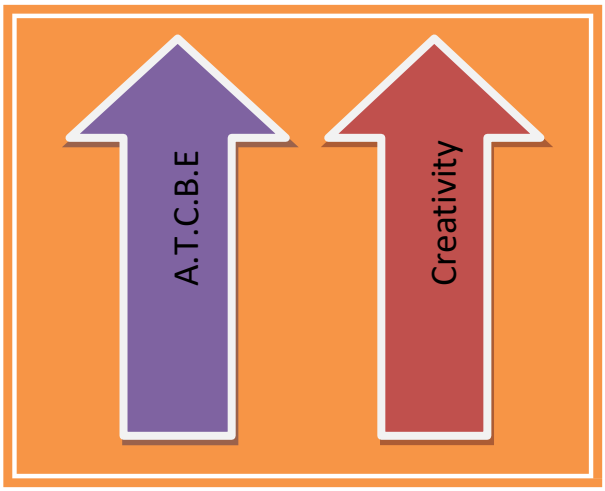

FIGURE 4.15 SHOWING THE POSITIVE CORRELATION BETWEEN A.T.C.B.E AND CREATIVITY

According to table 4.12, there is a 0.12 correlation coefficient between creativity and attitude toward computer-based education, which is significant at the 0.01 level of significance with df = 796. So, hypothesis number 12 is disproved. Thus, it can be said that there is a strong correlation between higher secondary students' attitudes regarding computer-based education and their inventiveness. But the bond was insignificant. Additionally, it had a very low positive association, as can be shown. The positive sign of the correlation coefficient suggests that attitudes toward computer-based education and students' creativity increase or diminish together.

HYPOTHESIS NO.13

$H0_{13}$ Higher secondary pupils' attitudes toward computer-based education and computer anxiety do not significantly correlate.

The entire sample was split into two categories—attitude toward computer-based education and computer anxiety—in order to evaluate the aforementioned hypothesis. The product moment

correlation method was employed to investigate the association between higher secondary students' attitudes regarding computer-based education and their computer anxiety.

TABLE 4.13: SHOWING THE CORRELATION BETWEEN ATTITUDE TOWARDS COMPUTER BASED EDUCATION ANDCOMPUTER ANXIETY OF HIGHER SECONDARY STUDENTS

Variables	Higher Secondary Students				
	N	df	Calculated 'r' Value at df = 796	Table value at df=796	Level of Significance
Attitude towards Computer Based Education	800	796	-0.66	r.05 = 0.06 r.01 = 0.12	*Significant
Computer Anxiety					

Significant at 0.01 level of confidence

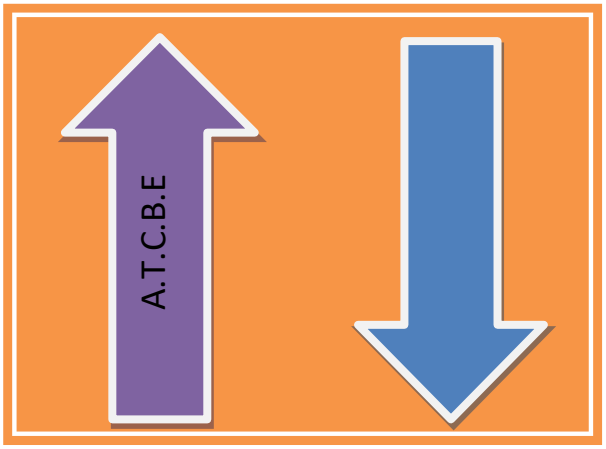

FIGURE 4.16 SHOWING THE NEGATIVE CORRELATION BETWEEN A.T.C.B.E AND COMPUTER ANXIETY

The correlation coefficient between attitude toward computer-based education and computer anxiety, which is shown in table 4.13, is -0.66, and it is significant at the 0.01 level of significance with df = 796. Thus, hypothesis number 13 is disproved. Thus, it can be concluded that there is a substantial relationship between students in higher secondary schools' attitudes regarding computer-based learning and their computer phobia. But the connection was bad. Additionally, it was a Moderately Negative Correlation, as well. The negative sign of the coefficient of association means that when higher secondary students' attitudes toward computer-based learning improve, their levels of computer fear drop and vice versa.

HYPOTHESIS NO.14

$H0_{14}$ In higher secondary students, there is no connection between creativity and computer phobia.

The entire sample was split into two categories, creativity and computer anxiety, in order to evaluate the aforementioned hypothesis. The product moment correlation method was employed to determine the significant link between creativity and computer phobia among higher secondary pupils.

TABLE 4.14: SHOWING THE CORRELATION BETWEEN CREATIVITY AND COMPUTER ANXIETY OF HIGHERSECONDARY STUDENTS

Variables	Higher secondary students				
	N	df	Calculated 'r' Value at df = 796	Table value at df=796	Level of Significance
Creativity	800	796	-0.1	r.**05** = 0.06 r.**01** = 0.12	Significant
Computer Anxiety					

Significant at 0.05 level of confidence

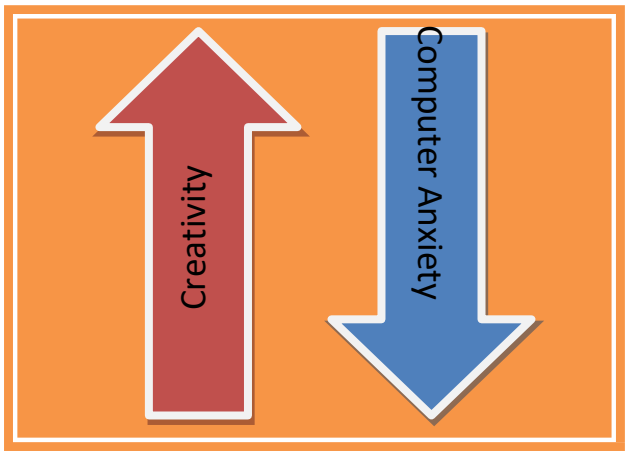

FIGURE 4.17 SHOWING THE NEGATIVE CORRELATION BETWEEN CREATIVITY AND COMPUTER ANXIETY

The connection between attitude toward computer-based education and computer anxiety is -0.1, which is significant at the 0.05 level of significance at df = 796, according to table 4.14. So, hypothesis number 12 is disproved. Thus, it can be said that there is a strong correlation between higher secondary students' creativity and computer phobia. But the connection was bad. Additionally, it had a very low negative correlation, as can be shown. The coefficient of correlation has a negative value, meaning that as creativity in higher secondary students increases, their level of computer anxiety will also decrease and vice versa.

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