

## RELATING SOCIO-ECONOMIC STATUS TO TEST ANXIETY AND ACHIEVEMENT MOTIVATION AMONG COLLEGE STUDENTS

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### Abstract

This study was undertaken to investigate the relationship between test anxiety and achievement motivation in relation to socio-economic status. A total sample of 100 college students (urban) comprising of 50 males and 50 females was collected using purposive sampling technique. Data was obtained by using valid and reliable statistical tools. The findings of the study revealed that socio-economic status at moderate level was observed among college students. There was no significant relation between test anxiety and achievement motivation influenced by gender. In fact a negative correlation between emotionality and achievement motivation was evident for female college students and total sample whereas positive relation was seen between worry and achievement motivation in total sample as well as in only male students and not in their counterpart. However, a positive and significant relationship was seen between test anxiety and SES in the total sample as well as between male and female students.

**Keywords:** Test Anxiety, Emotionality, Worry, Achievement Motivation, and Socio-economic Status

### INTRODUCTION

Socio-economic status (SES) is a measure of person's combined economic and social standing or class along with his family in the society based on educational qualifications, income, wealth, occupation. It includes person's subjective perception of his social status or class in relation to others. It is an elusive construct where the indicators of socioeconomic status vary widely in different societies/cultures. The three important indicators or components of socio-economic status are:

1. Educational status,
2. Work or Occupational status, and
3. Income or Economic status.

Across the lifespan that is beginning prior to birth and continuing into adulthood, SES has become one of the consistent and reliable predictors of wide array of outcomes both, in physical as well as psychological well being. People of high economic status often provide good facilities, show a high degree of involvement, and give quality education to their children. A child's socio-economic condition impacts his achievement in context to academics or work. The socio-economic status of the family is often found to be related to achievement motivation (AM).

Need for Achievement (n-Ach) was one of the first motives to be studied in detail. It refers to relatively stable predisposition to strive to success in achievement situations (McClelland, 1961). According to Lindgren (1993), achievement motivation involves overcoming obstacles, maintain high standards of work, competing through and striving to excel one's previous performance involving rivaling as well as surpassing others. All students are influenced by achievement motivation and hence, differ in the degree to which they experience this need.

In general, achievement motivation is a subjective and internal drive with a motive to excel in challenging tasks and succeed in their goals. The sources of achievement motivation are direct or indirect i.e., learned from parents, role models, media and even influenced socio culturally. Various factors like self-concept, self-confidence, interest; anxiety etc. moderates its effect.

Test anxiety is a special case of general anxiety in which an individual experiences extreme distress, discomfort, and anxiety in testing situations (Akinsola & Nwajei, 2013; Zeidner, 1998). According to Onyeizugbo (2010) test anxiety occurs as a consequence of facing any evaluating situation such as tests or examinations of any form and at any level. It consists of a mixed feeling of worry, apprehension, nervousness or uneasiness.

Zeidner (1998) postulated four components of test anxiety. These include physical, emotional, cognitive and behavioral. The emotionality component consists of autonomic reactions characterized by tension, fear, apprehension, and nervousness that are evoked by evaluative stress such as excessive perspiration, palpitation, nausea, headaches, stomach aches, nausea, dry mouth, and shortness of breath (Jing, 2007; Oludipe 2009; Sujit & Kavita, 2006). The worry component can be described as primary cognitive concern about the consequences of failure including tendencies such as negative self evaluation, self preoccupation and negative expectations learned through past experiences.

Test anxiety has been characterized as implicating emotionality and worry that cause people to cease focusing attention on relevant task at hand and problem solving behavior. The deliberating anxiety is suffered by test anxious individuals during examinations resulting in lowered performance. Such individuals become self-preoccupied, attending to internal events rather than the relevant task.

## REVIEW OF LITERATURE

A plethora of studies have revealed interesting findings in relation to test anxiety, achievement motivation and socio-economic status among individuals. The studies on SES have shown that it is a potential variable that may buffer the effect of test anxiety on achievement motivation.

Khan, Haider, Ahmed, and Khan (2011) have found negative relationship between achievement motivation and anxiety. In a study on nursing students, Khalaila (2015) observed high intrinsic motivation and low level of test anxiety in them. Studies by Choksi (1975) and Sud (2001) on achievement have observed that low achievement is significantly associated with high levels of test anxiety. Among Indian studies, Sud and Sharma (1990b) have found that school going females are more likely to have significantly more competitive attitude and urge to perform better than their male counterparts. Further, they observed these gender differences only at the upper social class.

Sud (2001) observed significantly high levels of test anxiety (worry as well as emotionality) associated with low achievement motivation. However, a low negative correlation between achievement motivation and anxiety as reported by Singh and Kaur (1976).

Alam (2001) conducted a comparative study on Muslim and non Muslim school children of Uttar Pradesh with regard to academic achievement in relation to socio-economic status, anxiety level and achievement motivation. The findings revealed a significant positive relationship was between SES (high) and academic achievement (high), a negative relationship between anxiety and academic achievement. Further, a positive relationship was seen between achievement motivation and academic achievement. A statistically significant inverse relationship between SES and anxiety emerged for both types of children. The level of anxiety in non-Muslim children was low but achievement motivation was high as compared to their Muslim counterparts.

Agrawal (1974) investigated the correlation between achievement motivation and SES. The findings reported positively significantly relationship between both the variables. The effect of gender on achievement motivation was also found to be independent of their SES.

Parikh (1976) found a significant and positive relation between achievement motivation and socioeconomic status.

Abrol (1977) revealed a direct relationship between family's SES and the level of achievement motivation viz., higher the SES, the higher will be need for achievement.

Mondal et al., (2013) in a study found that high test-anxious having high achievement motivation performed better academically. These students were seen highly focused, self- confident, calm, consistent and highly determined to suppress the standards of evaluative task.

Covington (2004) observed that need for achievement gives rise to high level of test anxiety which may produce emotional conflict between striving for success and avoiding failure during test situations.

Erdoğan et al., (2011) in his study found that if the students have high achievement motivation to outperform other rivals and surpass standards of academic excellence then the effect of test anxiety on academic performance may either reduce or become insignificant.

## OBJECTIVES OF THE STUDY

The objectives of the study were as follows:

1. To find out the level of college students in their socio-economic status.
2. To explore the relationship between test anxiety, achievement motivation and socioeconomic status of college students.
3. To examine gender difference among college students with regard to test anxiety, achievement motivation and socioeconomic status of college students.

## HYPOTHESES

1. There will be a moderate level of socio-economic status among college students.
2. There will be a significant relationship between test anxiety, achievement motivation and socio-economic status in college students.
3. There will be a significant relationship between relationship between test anxiety, achievement motivation and socio-economic status in male college students.
4. There will be a significant relationship between relationship between test anxiety, achievement motivation and socio-economic status in female college students.
5. There will be significant gender difference with regard to test anxiety, achievement motivation and socio-economic status among college students.

**METHODOLOGY**

**Design of the study**

The method employed in the present study to collect was convenience sampling method. The study was conducted on college students of Chandigarh.

**Sample**

For the present study, the researcher selected a total sample of 100 college students which included equal number of males and females i.e., 50 males and 50 females.

**Tools Used**

1. Socioeconomic Status Scale (SES) (Urban): SES scale developed Kuppaswami (1981, revised 2019) was used to assess SES of college students. The scale comprises of two forms: form A for adult and form B for students. It contains seven items in each of the three variables, i.e. education, occupation and income.
2. The Costello’s Achievement Motivation Scale: This scale was constructed by Costello and adopted by Mishra and Srivastava (1991) has been used to measure achievement motivation in college students.
3. Test Anxiety Inventory: A Hindi version of Test Anxiety Inventory (TAI-H) developed by Sud and Sud (1997) was used to assess individual differences in anxiety proneness in test situations. It has two subscales for measuring ‘worry’ and ‘emotionality’ components of test.

**Statistical tools**

The statistical tools used for the data analysis in the present study were Mean, S.D, percentage analyses, t-test, Scheffe’s *post-hoc* multiple comparison test and Karl Pearson’s coefficient of correlation. The data was analyzed with the help of computer by using SPSS 20 to get precise results.

**RESULTS**

**Hypothesis 1**

There will be a moderate level of socio-economic status among college students.

**Table 1: Frequencies and Percentage Analysis of college students with regard to their socio-economic status.**

Variable	Groups Compared	N	Percentage (%)
Socio-economic status	Upper	30	30.0
	Middle	59	59.0
	Lower	11	11.0
	<b>Total</b>	<b>100</b>	<b>100.0</b>

Table-1 shows that 30 percent of college students have upper socio-economic status, 59 percent of college students have middle socio-economic status and only 11 percent of them have low socio-economic status. During the analysis of socio-economic status variable, very few percentages of upper and lower categories were seen. Therefore, only three categories were considered for analysis viz., upper, middle and lower. Hence on the basis of the result, hypothesis-1 is accepted.

**Hypothesis 2**

There will be a significant relationship between relationship between test anxiety, achievement motivation and socio-economic status in college students.

**Table 2: Correlation between test anxiety, achievement motivation and socio-economic status in college students**

Sr. No.	Variables	N	Mean	SD	1	2	3	4	5
1	TA	100	37.03	9.26		.695**	.541**	-0.026	.388**
2	E		18.76	8.00			-.228*	-.305**	0.157
3	W		18.27	6.84				.322**	.342**
4	AM		14.78	3.28					.234*
5	SES		19.12	4.63					

\*\* p<0.01 level      \* p<0.05 level

Table 2 shows the test anxiety is positively and significantly related to its components emotionality (r=.695, p< 0.01), worry (r=.541, p<0.01) and Socio-economic status (r=.388, p<0.01). Secondly, achievement motivation is negatively and significantly related emotionality (r=-.305, p<0.01) and is positively and significantly related to worry (r= .322, p<0.01) and socio-economic status (r=.234, p<0.01). Lastly, socio-economic status is also positively correlated to worry (r=.342, p<0.01). Therefore, it can be inferred that there is significant relationship between some of the variables of the study. Hence, the hypothesis-2 is partially accepted.

**Hypothesis 3**

There will be a significant relationship between relationship between test anxiety, achievement motivation and socio-economic status in male college students.

Table 3 shows the test anxiety is positively and significantly related to its components emotionality ( $r=.929, p<0.01$ ) and Socio-economic status ( $r=.393, p<0.01$ ). Secondly, achievement motivation is negatively and significantly related emotionality ( $r=-.355, p<0.05$ ) and is positively and significantly related to worry ( $r=.915, p<0.01$ ) and socio-economic status ( $r=.234, p<0.01$ ). Lastly, socio-economic status is also positively correlated to emotionality ( $r=.286, p<0.05$ ). Therefore, it can be inferred from the table that there is significant relationship between only few of the variables of the study. Hence, the hypothesis-3 is partially accepted.

**Table 3: Correlation between test anxiety, achievement motivation and socio-economic status in Male college students**

Sr. No.	Variables	N	Mean	S.D	1	2	3	4	5
1	TA	50	36.56	9.26		<b>.929**</b>	0.110	-0.013	<b>.393**</b>
2	E		22.20	9.55			-0.266	<b>-.354*</b>	<b>.286*</b>
3	W		14.36	3.56				<b>.915**</b>	0.256
4	AM		14.12	3.35					0.163
5	SES		18.22	4.78					

\*\* p<0.01 level      \* p<0.05 level

**Hypothesis 4**

There will be a significant relationship between relationship between test anxiety, achievement motivation and socio-economic status in female college students.

**Table 4: Correlation between test anxiety, achievement motivation and socio-economic status in Female college students**

Sr. No.	Variables	N	Mean	S.D	1	2	3	4	5
1	TA	50	37.50	9.33	1	<b>.723**</b>	<b>.932**</b>	-0.062	<b>.379**</b>
2	E		15.32	3.73			<b>.423**</b>	-0.021	<b>.309*</b>
3	W		22.18	7.12				-0.070	<b>.334*</b>
4	AM		15.44	3.10					0.250
5	SES		20.02	4.34					1

\*\* p<0.01 level      \* p<0.05 level

Table 4 shows the test anxiety is positively and significantly related to its components emotionality ( $r=.723, p<0.01$ ), worry ( $r=.932, p<0.01$ ) and Socio-economic status ( $r=.379, p<0.01$ ). Secondly, achievement motivation is not correlated with any of the variables. Lastly, socio-economic status is also positively related to emotionality component ( $r=.309, p<0.05$ ), and worry ( $r=.334, p<0.05$ ). Therefore, it can be seen that there is significant relationship between few of the variables of the study for female students. Hence, the hypothesis-4 is partially accepted.

**Hypothesis 5**

There will be significant gender difference with regard to test anxiety, achievement motivation and socio-economic status among college students.

**Table 5: t-test score on gender differences on with regard to test anxiety, achievement motivation and socio-economic status among college students.**

Gender		N	Mean	S.D	t-value
TA	Male	50	36.56	9.26	-0.506
	Female	50	37.50	9.33	
E	Male	50	22.20	9.55	<b>4.746**</b>
	Female	50	15.32	3.73	
W	Male	50	14.36	3.56	<b>-6.949**</b>
	Female	50	22.18	7.12	
AM	Male	50	14.12	3.35	<b>-2.044*</b>
	Female	50	15.44	3.10	
SES	Male	50	18.22	4.78	<b>-1.973*</b>
	Female	50	20.02	4.34	

\*\*p<0.01      \*p<0.05

Table 5 shows that there is significant gender differences among college students on emotionality component ( $t=4.746$  significant at  $p<0.01$ ), worry component of test anxiety ( $t=6.949$  significant at  $p<0.01$ ), achievement motivation ( $t=2.044$  significant at  $p<0.05$ ) and socio-economic status ( $t=1.973$  significant at  $p<0.05$ ). The 't'-value for only test anxiety is not significant. Hence, the hypothesis-4 is partially accepted.

To identify which pair of group is significantly differed, this multiple comparison is conducted. Table 6 shows Sheffes's multiple comparison on socioeconomic status (SES). The mean difference between upper SES and lower SES is 10.94 and 10.89 significant at 0.05 and 0.01 respectively and between middle SES and lower SES is 7.89 and 7.86 significant at 0.05 and 0.01. For worry, mean difference between upper SES and lower SES is 5.75 at  $p<0.05$  and for emotionality components of test anxiety mean difference is 6.67 at  $p<0.01$  between upper SES and lower SES.

**Table 6: Sheffes's post hoc test multiple comparisons on socioeconomic status (SES)**

Dependent Variable	SES (I)	Mean	SES (J)	Mean Difference (I-J)	Mean Difference (I-J)
AM	Upper	15.52	Middle	0.87	0.78
			Lower	2.78	2.54
	Middle	14.73	Upper	-0.87	-0.78
			Lower	1.91	1.76
	Lower	12.97	Upper	-2.78	-2.54
			Middle	-1.91	-1.76
TA	Upper	40.01	Middle	3.05	3.03
			Lower	<b>10.94*</b>	<b>10.89**</b>
	Middle	36.98	Upper	-3.05	-3.03
			Lower	<b>7.89*</b>	<b>7.86**</b>
	Lower	29.12	Upper	<b>-10.94*</b>	<b>-10.89**</b>
			Middle	<b>-7.89*</b>	<b>-7.86**</b>
W	Upper	19.43	Middle	1.74	1.18
			Lower	<b>5.75*</b>	4.22
	Middle	18.25	Upper	-1.74	-1.18
			Lower	4.00	3.04
	Lower	15.21	Upper	<b>-5.75*</b>	-4.22
			Middle	-4.00	-3.04
E	Upper	20.58	Middle	1.30	1.85
			Lower	5.19	<b>6.67**</b>
	Middle	18.73	Upper	-1.30	-1.85
			Lower	3.88	4.82
	Lower	13.91	Upper	-5.1909	<b>-6.67**</b>
			Middle	-3.8875	-4.823

\*\* $p<0.01$  \* $p<0.05$

## DISCUSSION

The purpose of the present study was to explore and examine any significant differences in test anxiety levels, achievement motivation and SES. Test anxiety, its two components viz., emotionality and worry along with achievement motivation and socio-economic status were studied with regard to college students. The socio-economic status was further categorized into three categories namely upper, middle and lower. The results showed a moderate level of SES among college students as maximum of the sample lied in this middle range.

A significant relationship existed between test anxiety and SES especially between upper and lower categories as well as between middle and lower categories as seen by Sheffes's multiple comparison test. The reason for the above could be due to the three measured indicators of SES. Further, the multiple comparison test revealed that worry as well as emotionality components of test anxiety significantly affected upper SES students. Various studies on personality development have stressed on the impact of SES on children's well being which is often moderated by their own characteristics, family characteristics, and external support systems.

A significant correlation among test anxiety and SES indicates that SES influences TA. It is interesting to note that the findings of the present study reveal that achievement motivation (AM) has a negative correlation with emotionality component of TA for total as well as for only male students. It means that under testing situations autonomic reactions are evoked which may lead to hamper achievement motivation. On the other hand, a positive relationship was seen between achievement motivation and worry component for total as well as for only male students, revealing that a high primary cognitive concern about the consequences of failure will lead to more achievement motivation among the college students. However, no such relationship was seen in female college students. A study by Adsul and Kamble (2008) and Chaturvedi (2009) also reported that SES does not have a statistically significant influence on the achievement motivation among boys and girls.

The t-test scores of college students' shows that male students are high on emotionality component and on the other hand female students are high on the worry component of test anxiety. The female students seem to differ on achievement motivation and SES as compared to their counterparts. The reason for the difference could be the desire to perform better and excel in their tasks demonstrating high self concept.

Khan, Haider, Ahmed, and Khan (2011), Khalaila (2015) and Sud (2001) have found negative relationship between achievement motivation and test anxiety but such kind of relationship was absent in the present study. However, the emotionality and worry components of test anxiety showed some relationship.

## CONCLUSION

The present study focuses on the relationship between test anxiety, achievement motivation and socio-economic status in college students. Based on the findings of the study, it can be concluded that test anxiety is not influenced by gender. In the educational parlance, achievement motivation is influenced by a person's interest, attitude and personality attributes. There are other moderating variables which might affect it including family's SES. The findings of the present study revealed no correlation between test anxiety and achievement motivation. In fact a negative correlation between emotionality and achievement motivation was evident for female college students and total sample whereas positive relation was seen between worry and achievement motivation in total sample as well as in only male students and not in their counterpart. Categorically, SES at moderate level was observed among college students. A significant direct relationship was seen between test anxiety and SES in the total sample as well as between male and female students. Various studies on SES have seen it is to be a moderator that may buffer the effect of test anxiety on achievement motivation. Nevertheless, the findings of the current study should be generalized with caution because the sample size and spread did not adequately represent the population.

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