

Academic anxiety of male and female secondary school students in relation to their academic achievement

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ABSTRACT

Academic anxiety has become one of the most debatable topics of present school education. Academic Achievement of students is very much depending upon the level of academic anxiety. Present research study was carried out on a sample of 204 (Male & Female) secondary school students. Sample was drawn from four Secondary Schools of Aligarh District, (U.P.)India by employing purposive sampling technique. Analysis was done by calculating Mean, SD, Pearson Correlation (r) and t- test. A very comprehensive interpretation was made in the light of previous studies. Findings of the study revealed that a negative significant correlation was found between academic achievement and academic anxiety of secondary school students. Moreover, no significant difference was found between academic achievements of high and low academic anxiety of male and female students. Further researches are suggested for more generalised results.

Keywords: Academic anxiety, academic achievement, gender

Education is the panacea for all types of development. The overall development of an individual can be realised only through the proper provisions of education. It gives the power of rational and scientific thinking to an individual and makes him an enlightened personality.

Education is the only tool through which all ills of the society and country can be eradicated. It also produces good and responsible citizens who assist the growth and development of the country. Among all the ladders of education right from the kinder garden to university level, the stage of secondary education is the most important stage because it is the stage that provides very solid and sound foundation for the further education. But in the present day world due to academic anxiety caused by school system, family environment, socio-economic status, high expectations of society and so on, has put the students in the dearth of serious anxiety and thwarted students to perform best at their level.

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Academic Anxiety

According to the Dictionary of Education, anxiety means, “apprehension, tension, or uneasiness characterised by fear, dread, or uncertainty, the source of which is largely unknown or unrecognised by individual; may consist in persistent apprehensions of future events as well as in generalised emotions reactions to any choice point or decision” (Good, 1973). It plays an important role in human life because each and every person today is the victim of anxiety in different ways.

In the present study, academic anxiety is that kind of anxiety which is associated to the impending threat and menace from the environment of the academic institutions comprising of teacher, certain subjects like Science, Mathematics, English and so on. Academic anxiety is therefore a situation-specific form of anxiety related to the educational contexts. Academic anxiety encompasses not only test anxiety, but also anxiety about certain educational subjects in general. For instance, anxiety has been observed in students taking maths, reading, science, and foreign language classes (Cassady, 2010). Regarding the academic anxiety, experts have general consensus that academic anxiety is not bad for all times because without any sorts of anxiety most of us would be devoid of motivation and purpose to perform any activities of our daily life. Thus a moderate level of anxiety is always welcome to motivate students to study for exams and help them in better achievement. On the other hand, a high level of anxiety hampered the concentration power and affects the power of memory. High level of anxiety has become the main obstacle to the academic achievement of students.

Academic Achievement

Academic achievement concerns with achievement of students. It plays key role in declaring the students’ successful and unsuccessful. It also helps in selecting the students for different courses and recruiting them for various jobs. In general parlance, academic achievement is the level of learning outcome in particular area of subject in relation to knowledge, understanding, skill and application which are usually evaluated by concerned teachers in the form of test scores and examination. C.V. Good (1973), defined academic achievement as,

“knowledge attained or skills developed in the school subjects, usually designated by test scores or by marks assigned by teachers or both.” It is also considered as a key instrument through which student learns about their talents and competencies which as recognised as an essential part of developing career aspirations.

Academic achievement of students affected by several factors and academic anxiety is one of them. The present study is an attempt to reveal whether the performance of high academic anxiety group of students is different from students reporting low level of academic anxiety. In the present study academic achievement is taken as the performance of students after a course and is calculated in terms of marks obtained by them.

Review of Literature

Bhansali and Trivedi (2008) indicated that there was a significant difference between male and female students on academic anxiety. Girls were found to have more academic anxiety as compared to boys. Rezazadeh & Tavakoli (2009) reported significant negative correlation between test anxiety and academic achievement. Pleg (2009) reported that academic achievement was positively correlated with self-esteem and negatively correlated with test anxiety. Ginger *et al.* (2010) examined a practical programme to reduce test anxiety impairment and improve academic performance. Results indicated that adjusted HESI scores were seem to be almost 64 points higher for the corresponding treatment group versus controlling group. Onyeizugbo (2010) investigated the extent of variability in academic performance in relation to self efficacy and test anxiety. Analysis revealed negative correlation between test anxiety and academic performance. Robert *et al.* (2011) revealed parental involvement was positively correlated with mathematical achievement and math anxiety was negatively correlated with mathematics achievement. Jain (2012) found negligible negative correlation between academic anxiety and academic achievement and no significant difference was found between academic anxiety and academic achievement of boys and girls. Farooqui *et al.* (2012) reported that female medical students revealed significantly higher test anxiety level as compared to the male medical students. Sridevi

(2013) found a negative low correlation between general anxiety and academic achievement. Parvez & Shakir (2014) reported negative correlation between academic anxiety and academic achievement of secondary school students.

Apart from the above cited studies, large number of studies (Luigi, *et al.* 2007; Hamza, 2007; Sena, *et al.* 2007; McCraty, 2007; Rana & Mahmood, 2007; Kumar & Karimi, 2010) have reported that students having higher level of anxiety have low academic achievement and greater anxiety is related with poor academic achievement. (Gaurdy, & Spielbergr, 1971; Hancock, 2001; Cassady Johnson, 2002; Jing, 2007; Pleg, 2009; Ali, Awan, Batool, & Muhammad, 2013) have also resulted with negative correlation between academic anxiety and academic achievement.

Variables in the Present study

1. Dependent Variable: Academic Achievement
4. Independent Variables: (a) Academic Anxiety and (b) Gender (Male & Female)

Objectives

1. To find out the relationship between the academic anxiety and academic achievement of secondary school students.
2. To find out the effect of high and low academic anxiety on the academic achievement of secondary school students
3. To find out the impact of high and low academic anxiety on the academic achievement of male secondary school students.
4. To investigate the academic achievement of high and low academic anxiety groups of female secondary school students.
5. To find out the effect of high academic anxiety on the academic achievement of male and female secondary school students.
6. To find out the impact of low academic anxiety on the academic achievement of male and female secondary school students.

Hypothesis

1. There is no significant relationship between the academic achievement and academic anxiety of secondary school students.
2. There is no significant difference in the academic achievement of high and low academic anxiety groups of secondary school students.
3. There is no significant difference in the academic achievement of high and low academic anxiety groups of male secondary school students.
4. There is no significant difference in the academic achievement of high and low academic anxiety groups of female secondary students.
5. There is no significant difference in the academic achievement of high academic anxiety groups of male and female secondary school students.
6. There is no significant difference in the academic achievement of low academic anxiety groups of male and female secondary school students.

Methods and Materials

1. **Design:** Present study comes under the category of descriptive research and desired data were collected through questionnaire. Thus, survey design was used to carry out the present study.
2. **Population:** Students of secondary school of Aligarh District constitute the population of the study.
3. **Sample:** Sample comprised of 204 students of secondary school students. The purposive sampling technique was put in used to draw the sample from 4 secondary school students of Aligarh Muslim University, Aligarh, Uttar Pradesh, India.
4. **Research Tool Used:** For the purpose of data collection, a standardised research tool was used by the researcher. Academic Anxiety Scale for Children (AASC) by Dr. A.K. Singh and Dr. Sen. Gupta (2009) having the reliability and validity value of .65 & .57 respectively, was used to assess the academic anxiety of secondary school students.

Marks of previous class achieved by the secondary school students were considered as an index of their level of Academic Achievement. Personal data Sheet, developed by the researcher, was used to collect the demographic information of the students.

5. **Data collection:** The researcher personally visited the selected schools and administered the Academic Anxiety Scale for Children on a total number of 204 (Male & Female) secondary school students. Full freedom was given to the students to ask the meaning of difficult words or sentences which were beyond their understanding. Respondents were also given enough time and freedom to fill the scale. Finally, researcher collected the filled scales.

Data Analysis and Interpretation

Table 1: Showing relationship between the academic achievement and academic anxiety of secondary school students

Basis	No.	df	Correlation (r) (Pearson Product)
Academic achievement	204	202	- 0.231*
Academic anxiety	204		

*At 0.05 level of significance

The above table shows the figure of (-0.23) as a significant relationship between the academic achievement and academic anxiety of secondary school students. Thus, the null hypothesis is rejected. However, a significant negative correlation has been confirmed between the academic achievement and academic anxiety of secondary school students. It means, as the academic anxiety will increase so as the academic achievement will decrease and vice versa. This finding is also consistent with Cassady Johnson, 2002; Jing, 2007; Pleg, 2009; Ali, Awan, Batool, & Muhammad, 2013; Parvez & Shakir (2014); Jain (2012) also reported significant negative correlation between the academic anxiety academic achievements of boys and girls.

Table 2: Showing Difference in the academic achievement of high and low anxiety groups of secondary school students

Basis	No.	Mean	SD	df	t- value
Academic achievement of high academic anxiety group of students	123	366.43	80.49	202	0.35
Academic achievement of low academic anxiety group of students	81	405.12	75.31		

At 0.05 significance level

A close observation of table 2 shows the 't' value as 0.23 that is not statistically significant at 0.05 level of significance. Thus, the null hypothesis is accepted. This means no significant difference was found between the academic achievement of high academic anxiety group of students and academic achievement of low academic anxiety group students of secondary school students. This infers that the both groups of anxiety level have no difference in their academic achievements.

Table 3: Showing difference in the academic achievement of high and low academic anxiety groups of male secondary school students

Basis	No.	Mean	SD	df	t- value
Academic achievement of high academic anxiety group male of students	55	257.30	80.71	104	1.30
Academic achievement of low academic anxiety group of male students	51	405.23	79.62		

At 0.05 significance level

A close view of table 3 reflects the 't' value as 1.30 which is not statistically significant at 0.05 level of significance. Thus, the null hypothesis is accepted. It means, both, the academic achievement of high and low anxiety group of male students have no significant difference in their academic achievement level as per the levels of academic anxiety.

Table 4: Showing difference in the academic achievement of high and low academic anxiety groups of female secondary school students

Basis	No.	Mean	SD	df	t- value
Academic achievement of high academic anxiety group of female students	68	373.80	80.02	97	0.27
Academic achievement of low academic anxiety group of female students	31	404.93	68.19		

At 0.05 significance level

A close examination of table 4 gives the 't' value as 0.27 which is not statistically significant at 0.05 level of significance. Thus, the null hypothesis is again accepted. Therefore, it can be inferred that academic achievement of high and low level of academic anxiety of female students has no difference in terms of their academic achievement.

Table 5: Showing difference in the academic achievement of high academic anxiety groups of male and female secondary school students

Basis	No.	Mean	SD	df	t- value
Academic achievement of high academic anxiety group of male students	55	257.30	80.71	121	1.02
Academic achievement of high academic anxiety group of female students	68	373.80	80.02		

At 0.05 significance level

At a glance, table 5 shows the 't' value as 1.02 that is not statistically significant at the significance level of 0.05. Thus the null hypothesis is accepted. However, it can be interpreted that both the male and female group of high level of academic anxiety have no difference in their academic achievement.

Table 6: Showing difference in the academic achievement of low academic anxiety groups of male and female secondary school students

Basis	No.	Mean	SD	df	t- value
Academic achievement of low academic anxiety group of male students	51	405.23	79.62	80	2.65*
Academic achievement of low academic anxiety group of female students	31	404.93	68.19		

*At 0.05 significance level

A close view of table 6 shows the 't' value of 2.65 is statistically significant at 0.05 level of significance. Thus the null hypothesis is rejected. It means both the level of low academic anxiety groups of male and female have difference in their academic achievements. Therefore, on the basis of mean, it can be inferred that male having the higher mean value of academic achievement in relation to low academic anxiety, has better academic achievement than the female counterparts.

Findings of the Study

1. A significant negative correlation was found between the academic anxiety and academic achievement of secondary school students.
2. No significant difference was found between the academic achievements of low and high academic anxiety groups of secondary school students.
3. No significant difference was found between the academic achievements of high and low academic anxiety groups of male secondary school students.
4. No significant difference was found between the academic achievements of high and low academic anxiety groups of female secondary school students.
5. No significant difference was found between the academic achievements of high academic anxiety groups of male and female secondary school students.
6. A significant difference was found between the academic achievements of low academic anxiety groups of male and female secondary school students.

Conclusion

Changing scenario of education has called the restructuring in the existing education system. Academic achievement has become the best instrument to assess the performance of students in the classroom as well as teachers'. Effectiveness of curriculum is not spare of being assessed on the utility ground pertaining to socio and economic perspectives. Thus, academic achievement of students is very much dependent upon the school environment, quality of teachers, teaching process and so on. School as well as classroom environment are responsible to put students in the zone of anxiety or free from every bits of academic anxiety. However, it has been ascertained by experts that certain level of anxiety is necessary for pushing the students towards their betterment of academic performance. In the present research, a significant negative correlation was found between the academic anxiety and academic achievement of secondary school students. Thus, it has become necessary for teachers, parents, administrators and so on to ensure better educational environment that would help the students in performing at their best level.

Educational Implications of the Study

Although, this study is confined to only four schools of Aligarh Muslim University, Aligarh, U.P. India. But on the part of implications, it has its importance. Findings of the study would be helpful to assist the students, teachers, parents and so on in pertaining to the understanding problem and prospects of academic anxiety. Level of academic anxiety can be reduced to an acceptable level through the interventions of guidance of counselling. Thus general trends of academic anxiety of secondary school students can be estimated in the light of this study. However, present study will be helpful for designing curriculum, framing time table, arranging class room, organising guidance and counselling programmes, educationists to devise educational policy, psychologists in mooting out new tools and techniques for teaching and learning process.

Suggestions for Further Research

Present research study is confined only to a sample size of 204 secondary school students and that has

been drawn from the four secondary schools of Aligarh Muslim University, Aligarh. U.P. India. Therefore, for more generalised and realistic findings, further study can be conducted on a larger sample size by incorporating more demographic variables. Similar study can be put in to operation by associating present variables with different other researchable variables that might be personality, socio-economic, home and environment, familial variables and so on.

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