

ACADEMIC ANXIETY AND ITS EFFECT ON ACADEMIC ACHIEVEMENT AMONG SECONDARY STUDENTS

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ABSTRACT: Academic anxiety is one of the most important aspects of negative motivation and has direct debilitating effects on school performance. Dusek (1980, p. 88) defines Academic anxiety as "an unpleasant feeling or emotional state that has physiological and behavioral concomitants, and that is experienced in formal testing or other evaluative situations." Although most students experience some occasional anxiety when evaluated in different situations and areas, we are primarily concerned here with Academic anxiety as a relatively stable predisposition in evaluative situations (see Hill 1980). Hence, the present investigation has taken up to find out the impact of academic anxiety on academic achievement among secondary students in Nilgiris District. The data were collected from 200 9th standard students from Govt and Private schools in Nilgiris District using academic anxiety questionnaire. The academic achievement scores were collected from the school records. The simple random sampling method was adopted to select the sample. The collected data were analyzed using descriptive and f-test. The study concludes that there is significant difference in academic achievement between the groups based on academic anxiety among the selected secondary students.

Key Words: Academic Anxiety, Academic Achievement, Secondary Students, Test anxiety

INTRODUCTION

Academic anxiety is a feeling of apprehension and discomfort accompanied by cognitive difficulties during a test. There is general consensus that it involves at least two components: (a) a pattern of physiological hyper-arousal (i.e., increased heart rate, blood pressure, etc.) that may include physical changes and complaints, and (b) a cognitive obstruction or disorganization of effective problem-solving and cognitive control, including difficulty in thinking clearly (Friedman & Bendas-Jacobs, 1997). These two factors have also been termed emotionality (nervousness about the test situation) and worry (a cognitive aspect which involves concern over one's performance). A proposed third factor that has received less attention is social humiliation, referring to one's concern and awareness that others may negatively view test performance. This third factor could easily be subsumed by worry or cognitive

components. Research on the role of academic anxiety on performance has repeatedly demonstrated that high levels of cognitive academic anxiety promote the probability of notable declines in exam performance. The classic interpretation of this relationship was that irrelevant thinking and heightened worry intrude upon conscious thought during the test session itself, inhibiting performance through a retrieval-blocking process (Morris, Davis, & Hutchings, 1981; Sarason, 1986; Sarason, Pierce, & Sarason, 1996; Zohar, 1998). However, this view of academic anxiety has been demonstrated to be overly limited in scope, and contemporary conceptualizations of cognitive academic anxiety have focused on processing deficiencies that appear to accompany anxiousness over tests at various phases in the learning-testing cycle (Cassady, in press; Cassady & Johnson, 2002; Covington, 1985; Schwarzer & Jerusalem, 1992). Parallel work on pedagogy, language learning, and educational technology suggests that instructional approaches and digital supports can mitigate anxiety and bolster achievement (Arumugum, Nadeson, & Thamburaj, 2021; Thamburaj, Sivanathan, & Arumugum, 2025; Thamburaj & Ponniah, 2024; Thamburaj, 2021). Hence, in the present study, the investigator intends to examine academic anxiety and its effect on students' achievement, an important and timely line of inquiry.

LITERATURE REVIEW

Tuncay Ergene. (2011) found relationships among study habits, test anxiety, achievement, motivation, and academic success were investigated in a Turkish tenth grade high school sample consisting of 510 participants, 267 (52.4%) of whom were females and 243 (47.6%) were males. The data were collected by the Turkish version of Test Anxiety Inventory (TAI), Study Habits Inventory (SHI) and Self Evaluation Inventory (SEI). Students' GPA was accepted as the indicator of their academic success. Small but significant correlations were found between the worry subscale of TAI scores and academic success ($r = -0.18$, $p < 0.01$), and between the Study Habits Scale scores and academic success level ($r = 0.15$, $p < 0.01$). A positive relationship between study habits scores and achievement motivation level ($r = .39$, $p < 0.01$) was found. Gender, worry subscale of TAI and study habits predicted academic success in general. No correlation was observed between achievement motivation and academic success. Test anxiety and study habits were associated positively with academic success and there was no association with achievement motivation. Females were significantly higher in test anxiety scores as consistent with the literature. The results were discussed in the light of the literature.

Michele Marie Moore (2006) had investigated the prevalence of test anxiety and locus of control orientation in three groups of middle school students: Achieving Gifted (AG), Underachieving Gifted (UAG), and Nongifted (NG) students. Two instruments were used in the study: The *Test Anxiety Inventory (TAI)* and the *Children's Nowicki-Strickland Internal-External Control Scale (CNSIE)*. Participants completed the *TAI* by indicating their level of agreement with 20 statements that measure test anxiety symptoms before, during, and after a testing session. Responses ranged between *Almost Never* (1) and *Almost Always* (4). Participants completed the *CNSIE* by selecting *Yes* or *No* to indicate whether or not each of 25 statements described their feelings about a variety of situations. Although none of the groups received extreme scores on either instrument, a 3 x 2 MANOVA indicated significant differences between the groups by gender and achievement classification (AG, UAG, and NG). Underachieving gifted students were more externally oriented than achieving gifted students. There was also a significant difference in the locus of control orientation between achieving gifted and non gifted students; non gifted students were more externally controlled than achieving gifted students. In regards to underachievers, males were more externally controlled than females. Regarding test anxiety, females consistently reported higher levels of anxiety than males. Findings suggest the need for school interventions to reduce test anxiety among females and to assist students in developing the thought processes that give them a sense of control over the events in their life, in particular, their academic performance.

Cynthia C. Eubank, (2006) was examined the relationship among test anxiety, academic achievement and age in Associate Degree Nursing students. To test the relationship among the variables, two hypotheses were posed. Employing a descriptive research design, data were collected through the

Test Anxiety Inventory (TAI) (Spielberger, et al., 1980) and compared to the final course grades and ages of 107 first terms, second year ADN students. Data were analyzed by the use of descriptive statistics, the Pearson product moment correlation coefficient, and the ANOVA. The alpha level was set at 0.05. The findings of this study revealed that as test anxiety increased, academic achievement (course grade) of the ADN students significantly decreased ($r = -0.31, p < .05$). No significant relationship between age and test anxiety in the ADN students was found ($p = 0.635$). Recommendations for further research include early test anxiety assessment with interventions and follow-up test anxiety testing. Research that targets older students by specific ages may more clearly address age-related test anxiety influences.

RESEARCH DESIGN OF THE STUDY

Since the objective of the study is to find out the effect of academic anxiety on academic achievement, it needs to adopt survey method. The data were collected from 200 9th standard students from Govt. and Private schools in Niligiris District. The simple random sampling method was adopted to select the sample. The data were collected by using Personal Information Sheet and Academic Anxiety Questionnaire, developed by the investigator. The academic score were collected from school records. The collected data were analyzed using descriptive and f-test.

RESULTS AND INTERPRETATIONS

Hypothesis – 1: There will be significant mean score difference in Academic Achievement between the groups based on Academic Anxiety among the IX standard students.

Table – 1: Number, Mean and Standard Deviation in Academic Achievement between the groups based on Academic Anxiety among the IX standard students

| Groups in Academic Anxiety | Scholastic Achievement | | |
|----------------------------|------------------------|-------|-------|
| | N | Mean | SD |
| Low Group | 51 | 53.90 | 17.12 |
| Moderate Group | 96 | 62.69 | 15.59 |
| High Group | 53 | 66.43 | 12.08 |

The table 1 shows the Number, Mean and Standard Deviation in Academic Achievement between the groups based on Academic Anxiety among the IX standard students. As per the table, there is much difference in mean among all the three groups. Especially, there is a vast difference between low group and high group.

Table –2: Mean score difference in Academic Achievement between the groups based on Academic Anxiety among the IX standard students

| Variable | Groups | Sum of Squares | DF | Mean Square | F-value | p-value | Result |
|------------------------|----------------|----------------|-----|-------------|---------|---------|---------------------------|
| Scholastic Achievement | Between Groups | 4369.126 | 2 | 2184.563 | 9.496 | .000 | Significant at 0.01 level |
| | Within Groups | 45322.154 | 197 | 230.062 | | | |

Table 2 shows the Mean score difference in Academic Achievement between the groups based on Academic Anxiety among the IX standard students. According to the table, the calculated f-value is statistically significant at 0.01 level. Hence, the hypothesis – 1 is accepted. Further, it can be concluded that the Academic Anxiety of the students does affect their scholastic achievement.

Table –3: Scheffe’s Post Hoc analysis of Multiple Comparisons in Academic Achievement between the groups based on Academic Anxiety among the IX standard students

| (I) Groups | (J) Groups | Mean Difference (I-J) | Std. Error | Sig. |
|----------------|----------------|-----------------------|------------|------|
| Low group | Moderate group | -8.79* | 2.63 | .004 |
| | High group | -12.53* | 2.98 | .000 |
| Moderate group | Low Group | 8.79* | 2.63 | .004 |
| | High Group | -3.75 | 2.60 | .355 |
| High group | Low Group | 12.53* | 2.98 | .000 |
| | Moderate Group | 3.75 | 2.60 | .355 |

* The mean difference is significant at the .05 level.

The table 3 shows Scheffe’s Post Hoc analysis of Multiple Comparisons in Academic Achievement between the groups based on Academic Anxiety among the IX standard students. According to the table, there is a significant mean difference between low group Vs moderate and high, between moderate and low group and between high and low group. All the mean difference is statistically significant at 0.05 level.

FINDINGS AND CONCLUSIONS

Based on the results of the present study, it is found that there is significant difference in academic achievement between the groups based on teaching modes i.e., between conventional and smart class modes among the selected secondary students. Further, the smart class mode is highly effective than the conventional one.

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