

RELATIONSHIP BETWEEN STRESS AND ACADEMIC ACHIEVEMENT OF SENIOR SECONDARY SCHOOL STUDENTS

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ABSTRACT

The study investigated the relationship between stress and academic achievement of senior secondary school students. A total of 120 senior secondary school students randomly selected from six senior secondary schools of North-western Delhi participated in the study. Three null hypotheses were tested using data generated from research instruments. The instrument included Stress Inventory designed and standardized by Dr. Suman Nangia (1990). Academic achievement was taken from the students' previous examinations. Data generated from these instruments were correlated using Pearson product moment correlation method. Results showed a positive correlation between stress and academic achievement. Significant difference exists in the academic achievement of students having high, moderate and less stress. Students with high and moderate stress performed better than the students having less stress. Further it was also found that stress and academic achievement are not mediated by gender.

INTRODUCTION

Academic behaviour is something of great importance to parents, teachers and students themselves. Even the larger society is aware of the long term effects of positive or negative academic behaviour since graduates from educational institutions are expected to shape the destiny of society (Salami, 2001). Unfortunately academic behaviour of undergraduates is becoming worrisome and this has remained a matter of grave concern to many educationists (Aremu, 2001). These students have many obstacles to overcome in order to achieve their optimal academic performance (Womble, 2003). Stress is a common problem to male and female students in schools and the way it is managed may reflect in their academic performance (Salami, 2001). A total of 70% of the undergraduates experienced stress (Office of Planning and Institutional Research, Villanova University, 2008). The effects of stress can be positive or negative. Positively used, stress can be a motivator for an improved quality of life. Stress can be negative, when it becomes destructive as a result of how an individual negatively perceived it and reacted to it (Blonna, 2005).

Could it be that the level of stress being experienced by senior secondary school students has bearing with the reported negative trend in their academic performance? A number of studies have found a relationship between stress and poor academic performance (Clark & Rieker, 1986; Linn & Zeppa, 1984, Struthers, Perry & Menec, 2000). Bell (1995), Dubois & Felner (1992) and Ganesan (1995) have found that stress made significant contribution in poor school performance of adolescents. Felsten & Wilcox (1992) found a significant negative correlation between the stress levels of college students and their academic performance. In a similar study, Blumberg & Flaherty (1985) found an inverse relationship between self-reported stress level and academic performance. Malik & Balda (2006) also found a negative

correlation between stress and academic achievement. Stress pervades the life of students, and tends to impact adversely their mental and physical health, and their ability to perform schoolwork effectively (Clark & Rieker, 1986; Felsten & Wilcox, 1992).

Mostly it is found that Students with more stressed behaviour show average or poor results in academic achievement. Their concentration never works properly in educational field (Signal, 1998). Though most of the research findings support the negative relationship between stress and academic achievement, few researches conclude against them. Bankston & Zhou (2000) reported a significant positive relationship between stress and academic performance of college students. Kaplan & Sadock (2000) reported that an optimal level of stress can enhance learning ability. Gelow, Brown, Dowling & Torres (2009) stated that a state of emotional stress was reported to have a significant positive relationship with reported school performance. In another research Womble (2003) did not find any relationship between perceived stress and academic achievement of college students.

The majority of investigations related stresses have taken place in the United States which concentrated mainly on students in the medical field (Rafidah, Azizah, Norzaidi, Salwani, & Noraini, 2009). It is important to note that there were also some inconsistencies with the findings in the previous literature as stress was not shown to be positively related to academic performance. There also arises a question of which stress factor(s) has/have substantial influential on the academic achievement of students. This paper thus attempts to address these gaps by incorporating five areas of stress and correlating them with the academic performance of senior secondary school students of Delhi.

OPERATIONAL DEFINITIONS OF THE TERMS USED

Stress: Stress is defined as a state of psychological arousal that results when external demands tax or exceed a person's adaptive abilities (Lazarus, 1966; Lazarus and Folkman, 1984). In the present study stress refers to physical stress, social, economical and political stress, family stress and job and career stress.

Academic achievement: Good (1945) defines academic achievement as, "knowledge attained or skills developed in the school subjects, usually designed by test scores or by marks assigned by teachers, or by both". In the present study academic achievement refers to the marks obtained by the senior secondary school students in their annual examinations of +1 and pre-board examination of +2 classes.

Senior secondary school students: For the present study senior secondary school students are those who are receiving their +2 education from different senior secondary schools of Delhi.

OBJECTIVES OF THE STUDY

1. To investigate the relationship between stress and academic achievement of senior secondary school students.
2. To compare the stress levels of male and female senior secondary school students.
3. To compare the academic achievements of male and female senior secondary school students.
4. To compare the academic achievements of students having less, moderate and high stress.

RESEARCH HYPOTHESES

The following null hypotheses were tested in the study:

1. There exists no significant relationship between stress and academic achievement of senior secondary school students.
2. There exists no significant difference in the stress levels of male and female senior secondary schools students.
3. There is no significant difference in the academic achievements of male and female senior secondary school students.
4. There exists no significant difference in the academic achievements of students having less, moderate and high stress.

MATERIALS AND METHODS

Sample and sampling technique: To comply with the objectives of this study, 120 senior secondary school students were selected from different schools of Delhi. The mean age of the students was 16.57. The stratified random sampling technique was employed in selecting the sample. Students were stratified based on gender such that equal number of participants represented each of the two genders (male and female).

Measures: A stress inventory designed and standardized by Dr. Suman Nangia (1990) was used in this study to assess the level of stress in the individuals forming sample. The instrument contained 37 items having five areas of stress viz. (a) physical stress, (b) social, economical and political stress, (c) family stress, (d) job and career stress (e) other relationship. Internal consistency was evaluated for the stress inventory events and impact scores by computing Cronbach's alpha for the sample. Coefficient alpha for the event score was .92 and for the impact score was .91.

The demographic data of the participants were gathered via the information sheet. In the information sheet, data of the students include their name, gender, class, date of birth and academic achievement. The participants' performances in last two examinations (annual exam of +1, and pre-board exam of +2) were taken from their academic record. This represents the participants' academic achievement scores.

Scoring method and data analysis: The Stress Inventory was scored on 5 point scale Likert format, where by least often= 1 point to most often = 5 points. The scores were collated for analysis using product moment correlation (to find out the relationship between stress and academic achievement) and t-test (to compare the stress levels and academic achievements of male and female students & to compare the academic achievements of highly stressed, moderately stressed and less stressed students).

DISCUSSION

It is commonly held view that stress has a negative effect on academic performance. The result of present study does not provide any additional support for the often-observed negative relationship between stress and the academic achievement of adolescents or students. The findings of the present study reveal that there is a positive relationship between stress and academic achievement. This result of the present study is corroborated with the findings of the study conducted by Bankston and Zhou (2002), where they found a significant positive relationship between stress and academic performance of college students. The next finding of the present study reports no significant gender difference in stress and academic achievement of senior secondary school students. This means gender difference did not mediate senior secondary school students' stress and academic achievement. This finding of the present study is in congruence with finding of the study conducted by Eweniyi (2009), where he reported an insignificant gender difference in the stress level and academic

achievement of Nigerian undergraduate students. This suggests that whether one is a male or female, the way the individual feels stress has a bearing on his or her academic achievement.

The result of the study also indicated that there is a significant difference in the academic achievement of highly, moderately and less stressed students. Students with high and moderate level of stress have higher academic achievement than students with low levels of stress.

EDUCATIONAL IMPLICATION

These findings have practical implications for parents, teachers, educational planners, and of course for students. Students can rest assured that there is a positive relationship between stress and academic achievement. Teachers can understand that stress has a positive impact on a students' academic achievement and stress does not always correlate academic achievement negatively. Parents should be aware of the fact that few related areas of stress are essential for the better performance of their children. Stress related to career and job matter may not be as harmful in this context. Parents should identify level of stress of their children and should treat them accordingly. Parents should motivate them to read newspapers, magazine etc. in order to utilize their energy and to give them positive direction in relation to academics. Parents should inspire their children to develop self-discipline and balance state of mind. Teacher should arouse curiosity and interest among students. It depends on the teacher's efficiency that how a stressed student can achieve more in the examination. Teachers should not be over concerned of students' academic life. Instead they should help the students to remain concerned on their academic matter seriously. Teacher should maintain discipline and should not give unnecessary leniency to students, so that students take required stress or expectation from themselves in relation to their academic matters. Guidance services should be provided to develop confidence among students for better adjustment in classroom, family and society, to use their potential and talents which would help to achieve success in life. There should be adequate planning in academic work such that there would be enough intervals between the periods of examinations and continuous assessment tests.

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