
ACADEMIC STRESS AS A DETERMINANT OF ACADEMIC ACHIEVEMENT

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Abstract

This paper investigates the effect of academic stress on the academic achievement of senior secondary students. The Bisht Battery of Stress was chosen to collect primary data about the stress level of students studying in class XI. Academic achievement was measured by collecting data of the average marks secured by students in different examinations in an academic year. Pearson's coefficient of correlation was applied to find out the relationship between different variables. The data revealed that there is a significant negative correlation between academic stress and academic achievement. This indicates that more the academic stress of students, the less their academic achievement.

Key Words: Academic Stress, Academic Achievement, Senior Secondary Students

Introduction

Stress occurs when there is a mismatch between what the people aspire to do with what they are capable of doing. It can be defined as an individual's response to a situation which he perceives to a threat and thinks that he will not be able to cope with it. According to Lazarus (1966), stress exists when the demands on a person are perceived as taxing or exceeding that person's adjustive capacity. Back and Boydonaff (1967) opines that stress is commonly used in ordinary conversation which refers to all sorts of difficulties. Stress is the phenomenon of being stretched by the demands made on an individual, beyond the limits of his/her potential to cope. As a part of the adaptive response to stress, various functions of human body such as the autonomic, cardiovascular, gastrointestinal, and resistance systems may be affected (Arora and Bhattacharjee, 2008). The different factors of academic stress that are studied in the present investigation includes academic anxiety, academic frustration, academic conflict and academic pressure.

Academic achievement refers to the degree or level of success attained by a student in the performance of his academic tasks. According to Crow and Crow (1969), academic

achievement is the level which the learner is attaining through instructions in a specified area of learning.

Stress is an inescapable part of life- a natural and unavoidable factor experienced at one time or another by the vast majority of students. The life of a student is supposed to be filled with different kind of stressors, such as the pressure of academics associated with an obligation to success, uncertain future and difficulties envisaged for getting adjusted into the system. Though students of all age groups at all levels lead a stressed life, higher secondary student i.e. adolescents struggle with a wide range of problems. They have to go through a transitional journey from adolescence to adulthood the path of which is filled with a variety of risks, rapid changes, and apparently never-ending choices. Stress in students surely disturbs one's mental health and likely to disturb his/her academic achievement.

Rationale of the Study

Earlier researches have shown that the prevalence of stress is increasing day by day among students in higher education (Robotham and Julian, 2006; Stecker, 2004). Compared to children, adolescents face more threatening or challenging social experience. According to Donaldson et al. (2000), Williamson et al. (2003), the most common

stressors encountered by adolescents are related to school (academic difficulties, problems with teachers, bullying by peer groups) and interpersonal relationships. Stressful situation threatens the well being of adolescents. Time and again students adopt less desirable coping strategies such as consuming alcohol, smoking, and using illegal drugs (Pireceall and Keim, 2007).

Gucray (2003) claimed that adolescents need to be protected and kept under control in cognitive processes such as problem solving. They are not given the opportunity to take important decisions about their lives. In case they are given the opportunity to do so, they are rendered with little support and help from the society that may cause them to take faulty decisions. Moreover, certain inbuilt buffers of the society (which was prevalent earlier) such as extended family system, smaller communities with a closed uniform culture, traditional ways of thinking etc. are no longer available to the adolescents (Khera and Khosla, 2012). The out coming stress from such conditions is reflected by an alarming increase in crimes and suicidal rates among the youth. Therefore, there is a vital need to accustom today's youth with a new set of ways and means to deal with the challenges of life in a socially desirable manner (Khera and Khosla, 2012).

Many researches have also been conducted to find out the relationship between stress and academic performance of students. Padmasri (1992) has investigated stressful life events in the school system and educational development in children. The study revealed that boys experienced greater stress than girls which was negatively related to health. The factors which yielded significant correlations were stress and family support, stress and general health, stress and locus of control, stress and academic achievement. The study done by Kauts and Sharma (2009), also indicates that stress hampers student's academic performance and the students who practiced yoga performed better in

academics. Studies conducted by Bennett (2003), Malik, Balda and Punia (2004), Elliot et al.(2005), Choi, Abbott, Aurther and Hill (2007), Vijyalaxmi and Theresa (2012), also suggest that stress significantly affects students' academic performance.

Objectives of the study:

To determine the academic stress level of senior secondary students in relation to their gender.

To study the academic achievement of senior secondary students in relation to their gender.

To examine the relationship between academic achievement and different factors of academic stress of secondary students.

Hypotheses:

No significant difference exists in the mean scores of academic stress of senior secondary students in relation to their gender.

There is no significant difference in the mean scores of academic achievement of senior secondary students in relation to their gender.

There exists no significant relationship between academic achievement and different factors of academic stress of senior secondary students.

Methodology

The present study is based on descriptive method of research. A sample of 100 students from Agra, Uttar Pradesh, India, was selected on the basis of randomized sampling technique. The researcher used the Scale of Academic Stress (S.A.S.) of Bisht Battery of Stress Scale (B.B.S.S.) by Abha Rani Bisht to measure the level of academic stress among students. The questionnaire consists of 80 questions pertaining to four dimensions of academic stress namely academic anxiety, academic conflict, academic pressure and academic frustration. Average scores in the different examinations of students were taken to assess their academic achievement.

Results

H1-The first objective of the study aimed at determining the stress level of students in relation to their gender. Table 1 shows the mean stress scores of secondary students.

Table 1: Comparison of the level of academic stress of students

Gender	N	M	S.D.	T
Boys	50	287.1	47.7	14.58**
Girls	50	273.5	66.81	

*Significant at 0.05 level of significance.

**Significant at 0.01 level of significance.

The data presented in table-1 reveals the t-ratio computed to compare the mean scores of academic stress of senior secondary boys and girls. It is evident that the obtained t-value for difference between mean scores of academic stress of students is significant ($t=14.58$, $P = 0.05$, $P = 0.01$), at pre-test and post-test. The mean score of academic stress of boys is significantly higher than the mean score of girls. It implies that boys exhibit higher academic stress than girls. This is supported by the findings of Padmasri (1992), which also states that the presence of stress is more in boys than girls. This may be due to the fact that boys have high career ambitions. They might also be facing more parental pressure for better academic performance and better career choice as well. On the basis of the above findings, the hypothesis that there is no significant difference in the mean scores of stress level of senior secondary students is rejected.

H 2-The second objective of the research was to identify the difference in secondary school students' academic achievement on the basis of their gender. It was hypothesized that there is no significant difference in the senior secondary students' level of academic achievement. The table 2 shows the level of academic achievement of the respondents.

Table 2: Comparison of level of academic achievement of students

Gender	N	M	S.D.	t
Boys	50	257.5	51.49	2.32*
Girls	50	294.3	60.53	

*Shows significance at 0.05 level

**Shows significance at 0.01 level

A perusal of data presented in table 2 indicates that the obtained 't' value of academic achievement of girls is significant ($t=2.32$, $P = 0.05$) at 0.05 level. This shows that girls are academically more sound than boys. This may be due the prevalence of less stress in girls. Better academic performance of girls than boys in schools is also confirmed by past studies (Jacobs et al., 2002). Thus, the hypothesis 2 stating no significant difference in the academic achievement of secondary students is also rejected.

H 3- The third objective of the research was to identify the relationship between academic stress and academic achievement of senior secondary students. It was hypothesized that there is no significant relationship between senior students' stress and academic achievement. Table 3 shows the relationship between students' stress and academic achievement.

Table 3: Correlations between Academic Achievement and different dimensions of Academic Stress

Dimensions of Stress	N	R	Significance
Anxiety	100	-0.48	Significant**
Conflict	100	-0.35	Significant*
Pressure	100	-0.31	Significant*
Frustration	100	-0.49	Significant **

*Significant at 0.05 level of significant.

**Significant at 0.01 level of significant.

Discussion

A significant negative correlation exists between academic anxiety and academic achievement of students at 1% level of

significance. It indicates that, the more the anxiety, the less the academic achievement of students. High academic anxiety in students interferes with memory and concentration which are very much crucial for getting success in academics (Toibas, 1979). Reilly and Lewis (1991), also found that anxiety in students hampers their academic achievement. Similarly, the research conducted by Xiao (2013), Attri and Neelam (2013), and Das and Mishra(2014), reported that academic anxiety is negatively related to academic achievement.

There also exists a significant negative correlation between academic conflict, academic pressure, academic frustration and academic achievement. This reveals that the more the academic stress at these points, the less the academic achievement. The more pressure and frustration experienced by students, leads to a decrease in their academic achievement. The findings are supported by past researchers such as Choi, Abbott, Arthur and Hill (2007), and Rafidah, Azizah and Noraini (2007). Thus, the hypothesis stating that there is no relationship between academic stress and academic achievement of senior secondary students is rejected.

From the results shown above, it can be concluded that senior secondary students perceived high level of academic stress and the stress level of boys are significantly higher than the stress level of girls. However, in case of academic achievement, senior secondary girls show more proficiency than boys. Girls are sounder in academics than their male counterparts. Keeping in line with past researches, the present research reveals that academic stress significantly affects the academic performance of students. Therefore, steps should be taken by the parents and school authorities to remove the causes of stress to enhance the students' academic achievement.

References:

- Arora, S., and Bhatachrjee, J.(2008). Modulation of immune responses in stress by Yoga. *IJOY International Journal of Yoga*. July-Dec. 1(2): 45-55.
- Attari, A.K, and Neelam (2013). Academic anxiety and achievement of Secondary school students: A study on gender differences. *International Journal of Behavioural and Social Sciences*. 2(1).
- Back, K.W. and Boydonaff, M.D. (1967). Buffer Conditions in Experimental Stress. *Behavioral Science*, 384-390.
- Bennett, R. (2003). Determinants of undergraduate student drop out rates in a university business studies department. *Journal of Further and Higher Education*, 27(2), 123-141.
- Bisht, A.R. (1987). Manual of Bisht Battery of Stress Scale. Psychological Corporation, Agra.
- Choi, Y. B., Abbott, T. A., Arthur, M. A., & Hill, D. (2007). Towards a future wireless classroom paradigm. *International Journal of Innovation and Learning*, 4(1), 14-25.
- Crow, L, D. and Crow (1969). *Adolescent Development and Adjustment*. Mc Graw-Hill Book Company, United States.
- Das,S.K. and Mishra, B.(2014). Academic anxiety and academic achievement of Secondary school students. *International Streams Research Journal*. 4(6).
- Donaldson, D., Prinstein, M. J., Danovosky, M. and Spirito, A. (2000). Patterns of children coping with life stress:Implications for clinicians. *American Journal of Orthopsychiatry*, 70, 351-359.
- Eisdorfer, C.(1982). *Stress and human health: An analysis and implications of research, A study by the Institute of Medicine, National Academy of Sciences*. New York: Springer Publishing; pp. 11
- Elliot, A. J., Shell, M. M., Henry, K. B., & Maeir, M. A. (2005). Achievement goals, performance contingencies, and performance attainment: An experimental test. *Journal of Educational Psychology*, 97(4), 630-640.
- Gucray, S.S. (2003). The analysis of decision making behaviours and perceived problem solving skills in adolescents, vol.2, issue 2. pp 29-37.
- Jacobs, J. E., Lanza, S., Osgood, D. W., Eccles, J. S., & Wigfield, A. (2002). Changes in children's self competence and values: Gender and domain differences across grades one through twelve. *Child Development*, 73 (2), 509-527.
- Kauts, N. and Sharma,S. (2009). Effect of yoga on academic performance in relation to stress. *International Journal of Yoga*. 2(1). 39-43.
- Khera, S., and Khosla, S., (2012). A study of core life skills of adolescents in relation to their self concept developed through Yuva School life skill programme.

International Journal of Social Science and Interdisciplinary Research. 1(11). 115-124.

Lazarus, R.S. (1966), *Psychological Stress and Coping Process*, New York: Mc. Graw Hill.

Malik, P.R., Punia, S. and Balda (2004, July). *Mental Stress and Academic Achievement of High I. Q. Adolescents*, Paper Presented in the 8th International and 39th National Conference of India Academic of Applied Psychology on Positive Health and Well Being, Rohtak.

Padmasri, J.V. (1992). *Stressful Life Events in Schools System and Educational Development in Children*. M. Phil. Disst., Sri Venkateswara University.

Pierceall, E.A. and Keim, M.C. (2007). Stress and coping strategies among community college students. *Community College Journal of Research and Practice*, 31, 703-712.

Rafidah, K., Azizah, A., Norzaidi, M. D., Chong, S. C., & Salwani, M. I. (2009). Stress and academic performance: empirical evidence from university students [Electronic version]. *Academy of Educational Leadership Journal*.

Reilly, R.R. and Lewis, E.L. (1991). *Educational*

Psychology. New York: Laural Tanner Macmillan Company Inc.

Robotham, D. and Julian, C. (2006). Stress and higher education students: A critical review of the literature. *Journal of further and higher education*, 30, 107-117.

Stecker, T. (2004). Well being in academic achievement. *Medical Education*. 38, 465-478.

Toibas, S. (1979). Anxiety research in educational psychology. *Journal of Educational Psychology*, 71, 573-582.

Vijyalaxmi, N.S. and Theresa, S.A. (2012). Effect of Stress in Academic Success Among Higher Secondary School Students. *GCTE Journal of Research and Extension in Education*. Vol. 7 (I) January pp. 114-119.

Williamson, D.E., Birmaher, B., Ryan, N.D., Shiffrin, T.P., Lusk, J.A., Protopapa, J., et al. (2003). The stressful life events schedule for children and adolescents: Development and validation. *Psychiatry Research*, 119, 225-241.

Xiao, J. (2013). Academic stress, test anxiety and performance in a Chinese high school: The moderating effects of coping strategies and perceived social support. *International Research Journal in Humanities and Social Sciences*. 3(4).
