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Academic stress and self-concept of high school students

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Abstract

The present investigation was undertaken to understand the relationship between academic stress and self-concept of high school students. The present study also examined the difference between government and private high school students on self-concept and academic stress. The sample for the investigation consists of 400 boys and girls from government and private high schools of Aligarh district within the age range of 15-17 years. To examine the self-concept of high school students Self-Concept Questionnaire developed by Dr. R. K. Saraswat (1984) was used which provides six dimensions viz. physical, social, intellectual, moral, educational, and temperamental as well as a total self-concept score. Academic Stress Questionnaire (ASQ) developed by Akram, Ilyas and Sabiha was used to investigate academic stress. Findings showed statistically significant negative correlation between academic stress and self-concept. Private school students are significantly better on moral self-concept and temperamental self-concept. Private and government high school students are significantly differed only on one dimension of academic stress i.e. inadequate academic environment in the college.

Keywords: Academic Stress, Self-concept, High School Students.

Introduction

Modern life is full of stresses and strains. Everybody in this world faces stressors in one or the other area of life. Stress is a part of life no matter how wealthy, powerful, attractive, or happy people might be. However, stress may take different forms depending on the situation. Stress and its manifestations, such as anxiety, depression, and burnout, have always been seen as a common problem among people in different professions and occupations. Stress and anxiety harm a person's physical, psychological and emotional wellbeing. Stress has been seen tightening its grip on the students, as they have to compete at every step of their academic career in this fast moving world. High school students seem especially vulnerable to this reality. Most of the students in high school face stress almost every day. Some of this stress is good and the balance of the stress can be overwhelming. An optimum level of stress is good for better performance because the overwhelming stress pushes a student to do things they would not normally do. High school may be stressful for many students. They feel the effects of stress in harsh and also negative ways. Some of these effects include depression, general fatigue, insomnia, mood swings, temper tantrums, a sudden drop in grades and aggression. Failure to complete high school not only affects the well-being of the students, but also the well-being of the nation as a whole. Auerbach and Grambling (1998) ^[6] argue that stress can lead to serious problems if it is not managed effectively. Stress and anxiety levels affect the students academically and change the way the person thinks and acts. Student faces several ups and downs. The peer pressure, demand of the teachers and parents for good grades, and the competitive environment in the schools lead to stressful life for the students. Consequently, stressful life leads to depression, anxiety and in severe cases suicide and suicidal attempts among students. School-related stress is the most prevalent, untreated cause of academic failure. According to The American Youth Policy Forum (2008) ^[5] many youth drop out in the ninth grade, at the peak of adolescence, both because they are failing or have low test scores and because they are not adjusting well to high school. Research has shown that adolescents' mental health problems are associated with academic underachievement, social skill deficits, and increased levels of suicidal inclination and behaviors (Kovacs, 1989) ^[19]. Chiang (1995) ^[8] stated that school is one of the main sources of stress among adolescents. Such stress comes from too much homework, unsatisfactory academic performance, preparation for tests, lack of interest in a particular subject, and teachers' punishment.

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High school students belong to adolescence stage of human span of life. According to World Health Organization (1997) adolescence is being between the ages of 10-19 years. Adolescence period is conceptualized as a transitional period, which begins with the onset of puberty and ends with the acceptance of adult roles and responsibilities. During adolescence period the physical, intellectual, and emotional characteristics and patterns of childhood are gradually replaced by adult ones, and girls and boys progressively evolve into a state of relative socio-economic independence (UNICEF, 1999). Adolescence is the period of growth that is the bridge between childhood and adulthood. Adolescence period is generally associated with self-exploration and identity seeking. It is a very crucial period of life because adolescents have to grow into the new mind and body and find the coherent sense of self that is necessary for their adjustment in society. Thus, the most difficult developmental period is probably adolescence period. The period of adolescence has sometimes been viewed as filled with stress and uncertainty about self, riddled with sudden and frequent mood shifts, a time dubbed as the identity crisis. At this stage, besides dealing with the physiological and emotional changes, an adolescent has to come up with parental expectations, his career and school, which at times tend to have negative effects on him. Adolescents are generally more prone to stress and anxiety.

Self-concept

Self-concept refers to the composite of ideas, feelings, and attitudes people have about themselves. Self-concept is an effort to explain ourselves to ourselves, to build a scheme that organizes our notions, sentiments and approach about ourselves. But this scheme is not enduring, incorporated or static because in every sphere of our life our self-perceptions vary from situation to situation (Woolfolk, 1998) ^[29]. Generally self-concept embodies the answer to who am I? Self-concept may be defined as the totality of a complex, organized, and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence. Self-concept can be defined as the concept that an individual has of him- or herself (Le François, 1996) ^[20]. Self-concept is developed and maintained through the process of our action and then reflecting on what we have done and what others tell us about what we have done. That is, self-concept is not something which we born with, but is developed by the individual through interaction with the environment and reflecting on that interaction. The self-concept develops through continuous self-assessment in different circumstances. Self-concept, like all other cognitive concepts, develops and refines with growing age and increasing experience. According to Harter (1985) ^[15] self-concept develops in stages. The development of self-concept is through the learning process since childhood. A child surrounding, experiences and the style of parental upbringing contribute a significant influence towards the development of self-concept. If a child lives in a confused and negative parental upbringing, as a result this child tends to develop negative self-concept. On the contrary, a positive parental upbringing will develop a positive self-concept. According to Wang and Lin (2008) ^[28] self-concept was seen as the general confidence that individuals felt about themselves and the levels of an individual's self-concept predict whether or the extent to which he or she was able to accomplish

academic tasks successfully or unsuccessfully. A substantial body of literature indicates that self-concept is related to academic performance. Moderate to strong relations between academic achievement and academic self-concept has been found in a large proportion of research (Abouserie, 1995; Chowdhury & Pati, 1997; Collins, Hanges, & Locke, 2004; Wang & Lin, 2008) ^[1, 9, 11, 28]. Student self-concept refers to a student's perceptions of his or herself in both academic and nonacademic domains such as social, behavioral and job-related (Manning, 2007). The self-concept of the students can be affected by certain factors. It can be due to the teachers' attitude toward them or the way their parents treat them. These factors can influence the self-concept of students either in positive way or in negative way.

Academic stress

Stress is viewed as a negative emotional, cognitive, behavioural and physiological process that occurs as a person tries to adjust to or deal with stressors (Bernstein, *et al.* 2008) ^[7]. Stress is an unavoidable consequence of life. In words of Selye (1956), any external event or any internal drive that threatens to upset the organism equilibrium is stress. Any circumstances or situations that threaten a person's normal functioning are called stressors. Stress is perceived differently by different people. A situation may be stressful for a person but it may not be perceived stressful by another person. Therefore, Stress is perceived in different ways and may mean different thing to different individuals. Stress can have both positive and negative effects on people. Stress that causes negative impacts is called distress and stress that have positive impacts is called eustress. It means that stress may be a normal, adaptive reaction to threat. Most of the psychologists assert that moderate level of stress motives individuals to achieve and fuels creativity, although stress may hinder individuals from performance on difficult tasks (Auerbach & Grambling 1998) ^[6]. Stress has become an important topic in academic circles. Many scholars in the field of behavioural science have carried out extensive research on stress and its outcomes and concluded that the topic needed more attention (Agolla, 2009) ^[2]. Academic stress is conceptualized as a mental distress with respect to some anticipated frustration associated with academic failure or even unawareness to the possibility of such failure. It is a mental feeling of uneasiness or distress in reaction to a school situation that is perceived negatively. The consequences of academic stress may be exhibited in the form of major health hazards and problems, both physical and mental. Academic stress has an adverse effect on the mental and physical health of adolescents. Reaction to stressful situation is based on individual appraisals and interpretations, when students interpret stressful situations as a dangerous or threatening they experience feelings of tension, apprehension and worry. Academic problems have been reported to be the most common source of stress for students (Aldwin & Greenberger, 1987; Clark & Rieker, 1986; Evans & Fitzgibbon, 1992; Felsten & Wilcox, 1992; Mallinckrodt *et al.*, 1989; Struthers *et al.*, 2000) ^[4, 10, 13, 14, 21, 26]. In India, psychologists have reported that academic stress leads to adolescent distress (Iype, 2004) ^[18]. Academic stress is considered as an emotional tension of a student which is manifested or felt by him during his failure to cope with the academic demands as Aldwin and Greenberger (1987) ^[4] found that perceived academic stress was related to anxiety and depression in college students. While too much stress

can interfere with a student's preparation, concentration, and subsequently performance, but positive stress can be helpful to students by motivating them to peak performance (Pfeiffer, 2001) [23]. Struthers *et al.* (2000) [26] reported that a high level of academic stress was associated with lower course grades. Schafer (1996) [25] found in his study that the most irritating daily hassles were usually school-related stressors such as constant pressure of studying, too little time, writing term papers, taking tests, future plans, and boring instructors. Academic 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) [10, 14].

Review of related literature

On the basis of survey conducted on college students, American College Health Association's Group Data Report (2006) found that the one greatest health obstacle to college students' academic performance was academic stress. Of the 97,357 college students who participated in the survey, 32 percent reported that academic stress had resulted in an incomplete, a dropped course or a lower grade. Academic stress can be the ultimate career stopper.

Mboya (1995) [22] examined the relationship between perceived teachers behavior and adolescent's self-concept. It was found that a significant positive relationship existed between perceived teacher support, interest, encouragement, expectations and participation, and the adolescent family, school and health self-concepts.

Tarquin *et al.* (2008) [27] studied relationship among previous experiences of student alienation and various aspects of self-concept. Students were asked to report on their worst experience in school, symptoms they had following their worst experience, and overall feelings about themselves. Results showed a moderate negative correlation between self-concept and student alienation.

Huan, Yeo, Ang, and Chong (2005) [16] investigated the role of optimism together with gender, on students' perception of academic stress. Four hundred and thirty secondary school students from Singapore participated in this study and data were collected using two self-report measures: the Life Orientation Test and the Academic Expectations Stress Inventory. Results showed a significant negative relationship between optimism and academic stress in students. Gender was not a significant predictor of academic stress and no two-way interactions were found between optimism and gender of the participants.

Husain, Kumar and Husain (2008) [17] explored the level of academic stress and overall adjustment among Public and Government high school students and also examined the relationship between academic stress and adjustment. Results indicated that magnitude of academic stress was significantly higher among the Public school students where as Government school students were significantly better in terms of their levels of adjustment. However, inverse but significant relationships between academic stress and adjustment were found for both the group of students and for each type of school.

Significance of the study

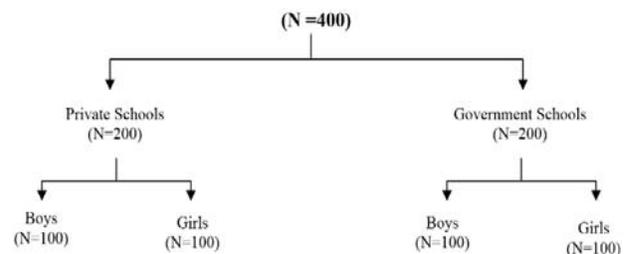
High school students are in adolescence period and it is the age of stress and strain and children have to cope up with many types of stressful situation, academic stress affects the

personality make up of adolescents the most. It has adverse effect on the self-concept of the students. Self-concept is considered by many researchers and psychologists as the central theme of life which influences all relationships, performances and achievements either positively or negatively. Self-concept is a key to success because the basic assumption is that individuals who feel good about themselves and their abilities are the ones who are most likely to succeed. The importance of self-concept within educational settings has been discussed by several scholars. Keeping in mind the growing problem of academic stress among high school students the study was undertaken to examine the relationship between academic stress and self-concept.

Method

Sample and sampling technique: In the present study the sample comprised of 400 students of Class-X who were taken from four Private and government schools of Aligarh whose age ranged from 15 to 17 years. The following figure shows the clear break-up of the sample.

Distribution of Subjects



Research tools

Self-Concept Inventory

In order to measure self-concept Dr. Raj Kumar Saraswat's Self-concept questionnaire (1984) [24] was used. The questionnaire provides six dimensions namely physical, social, intellectual, moral, educational, and temperamental as well as a total self-concept scores. The questionnaire consisted of 48 items with 8 items falling under each dimension. Each item is provided with five alternatives. The scale has high internal consistency. The reliability was found to be 0.91 for the total self-concept measure. There is no time limit for responding to all the items. The maximum obtained score is 240 and minimum is 40. High score on this inventory means high self-concept and low score means low self-concept.

Academic Stress Questionnaire (ASQ): ASQ was a 36 items questionnaire used to assess the academic stress of high school students and was developed by Mohammad Akram, Mohd. Ilyas Khan and Sabiha Baby. The ASQ provides five factors namely inadequate academic environment in college/university, lack of adjustment, apprehensive about future, poor administration and worries. Cronbach's alpha for all five factors were found to be .68, .60, .55, .53, and .57 respectively. The construct validity of ASQ ranges from 0.41 to 0.88.

Procedure

To obtain the data, both the scales were administered to a group of high school students during their class hours. All the required suggestions were given to them and they were

also assured that their responses will be kept confidential and only the researcher would have access to their data.

Statistical analysis

In the present study for analyzing the obtained data, Pearson Product Moment Correlation was used to find out the

relationship between academic stress and self-concept of high school students and t-test was used to investigate the difference between private and government high school students on academic stress and self-concept.

Result & Discussion

Table 1: Coefficient of correlation between academic stress and self-concept

Variables	PH	SO	INT	MO	ED	TEMP	TOTAL SC
Inadequate academic environment in the college	-.078	-.068	-.102 *	.038	-.004	-.043	-.051
Lack of adjustment	-.015	-.121*	-.105 *	-.035	-.070	-.079	-.037
Apprehensive about future	-.027	-.074	-.055	-.041	-.031	-.027	-.014
Poor administration	-.029	-.150**	-.049	-.101*	-.017	-.061	-.065
Worries	-.098*	-.117*	-.100*	-.007	-.034	-.030	-.101*
Total academic stress	-.091	-.117*	-.115 *	-.026	-.045	-.249**	-.077

**P < 0.01 level, *P < 0.05 level.

(Abbreviations used: PH- physical, SO- social, INT- intellectual, MO- moral, ED- educational, TEMP- temperamental, TOTAL SC- total self-concept).

Pearson product moment co-efficient correlation (table1) was carried out to see the relationship between academic stress and self-concept of high school students. Result revealed that inadequate academic environment in the college has significant negative correlation only with intellectual self-concept as 'r' value (-102) is significant at 0.05 level. Lack of adjustment has significant negative correlation with social and intellectual self-concept as 'r' values (-.121) of social self-concept and intellectual self-concept (-.105) are significant at 0.05 level. Furthermore another dimension of academic stress i.e. apprehensive about future is not significantly related to any of the dimensions of self-concept. Poor administration has statistically significant negative correlation with social self-concept and moral self-concept as 'r' value (-.150) for social self-concept is significant at 0.01 level and 'r' value (-.102) for moral self-concept is

significant at 0.05 level. The last dimension of academic stress (worries) has statistically significant negative correlation with three dimensions of self-concept viz. physical (r = -.098, p<0.05), social(r =.117, p<0.05) and intellectual (r =-.100, p<0.05) self-concept. Furthermore total academic stress has statistically significant negative correlation with social (r = -.117, p 0<.05), intellectual (r = -.115, p<0.05) and temperamental self-concept (r = -.249, p<0.01).

Findings of the present study showed an inverse relationship between students' self-concept and academic stress. This implies that higher the adolescents' academic stress lower the level of self-concept among high school students. Therefore it can be safely concluded that academic stress and self-concept of high school students are negatively related.

Table 2: Difference between private and govt. high School students on self-concept

Variables	sub samples	N	Mean	S.D	t-value
Physical	private	200	29.94	3.73	1.17
	Govt.	200	29.45	4.51	
Social	private	200	29.16	4.33	1.04
	Govt.	200	28.71	4.29	
Intellectual	private	200	29.22	4.02	-.275
	Govt.	200	29.11	3.60	
Moral	private	200	31.92	4.54	4.88***
	Govt.	200	29.42	5.71	
Educational	private	200	30.96	4.20	-1.65
	Govt.	200	30.28	3.99	
Temperamental	private	200	29.62	16.27	2.56*
	Govt.	200	26.56	4.28	
Total self-concept	private	200	176.28	22.94	1.00
	Govt.	200	174.32	15.34	

***P < 0.001 level, *P < 0.05 level.

T test was carried out to see the difference between private and government high school students on self-concept and its dimensions. Result showed that private and government high school students differed significantly on moral self-concept. The mean scores (31.92) of private high school students are greater than the mean scores (29.42) of government school students. This clearly indicates that private high school student have much better moral self-concept as compared to

government high school students as t value (4.88) is statistically significant at 0.001 level. This is because of being in private schools make them feel good. They may feel that they have better opportunities to become successful. In private schools, disciplines are maintained and educators pay more attention on students' overall personality development. These may help to boost private students' moral self-concept. Furthermore result also revealed that private high school

students and government high school students are significantly differ on temperamental self-concept. Mean scores (29.62) of private high school students are greater than the mean scores (26.56) of government high school students and the t value (2.56) is statistically significant at 0.05 levels. This shows that temperamental self-concept in private high school students are better than government high school students. This result may be explained in terms of poor family background and inadequate academic environment of govt. school students. All these contribute to develop negativity, pessimism and aggressiveness among them. Therefore their temperamental self-concept is low. Furthermore t-test failed to reveal a statistically reliable difference between the mean scores of private and government students on other dimensions of self-concept like physical, social, intellectual, and educational as well as total self-concept.

Table 3: Difference between private and govt. high School students on academic stress

Variables	sub samples	N	Mean	S.D	t-value
Inadequate academic environment in the college	Private	200	21.67	3.87	2.96**
	Govt.	200	20.40	4.69	
Lack of adjustment	Private	200	17.02	3.68	-.20
	Govt.	200	17.10	4.01	
Apprehensive about future	Private	200	16.72	3.32	.72
	Govt.	200	16.44	4.33	
Poor administration	Private	200	13.88	2.81	.63
	Govt.	200	13.68	3.64	
Worries	Private	200	13.98	3.12	-.99
	Govt.	200	14.32	3.48	
Total academic stress	Private	200	82.90	13.87	.57
	Govt.	200	82.04	15.59	

** P < 0.01 level.

Table 3 indicate that private and government high school students are differed only on one dimensions of self-concept i.e. inadequate academic environment in college as mean scores (21.67) of private high school students are greater than mean scores (20.40) of government high school students and the t value (2.96) is statistically significant at 0.01 level. It is also clear from the table that there is no statistically significant difference between private high school students and government high school students on other dimensions of academic stress as well total academic stress. We can observe from the table that the mean scores of private high school students are slightly greater on most of the dimensions of the academic stress and total academic stress. This is due to the fact that students are overburdened by lots of home works, high expectations from parents and teachers and high competitions in private schools. This may create anxiety and stress among them. On lack of adjustment as well as worries, govt. high school students have slightly greater mean scores than private high school students. This may be due to the fact that in govt. schools there is lack of interactions between teachers and students, discipline, teaching facilities and also lack of concerns of teachers towards students. In such a poor academic environment students may not develop good adjustment and may be getting worried about their future in this highly competitive

world.

Conclusion

Correlation analysis revealed that the first dimension of academic stress (inadequate academic environment in the college) has significant negative correlation only with intellectual self-concept. Second dimension of academic stress (lack of adjustment) has significant negative correlation with social and intellectual self-concept. Third dimension of academic stress (apprehensive about future) is not significantly correlated to any of the dimensions of self-concept. Fourth dimension of self-concept (Poor administration) has statistically significant negative correlation with social self-concept and moral self-concept. Fifth dimension of academic stress (Worries) has significant negative correlation with physical, social, intellectual and total self-concept. And total academic stress has significant negative correlation with social, intellectual and temperamental self-concept. Another findings of the study showed that private high school students have better moral and temperamental self-concept as compared to government high school students. Next findings of the study indicated that private and government high school students are differed on first dimension of academic stress i.e. inadequate academic environment in the college as private high school students have more stress on this dimension of academic stress as compared to government high school students.

Educational implication

An educational implication of this study is that academic stress and self-concept are negatively correlated. Therefore parents and teachers should try to remove unnecessary academic stress from students by using various techniques. This study can contribute in raising awareness among teachers to create a supportive school environment. This may help students to reduce their stress and enhance their self-concept. It is very important and necessary to cultivate an all-round personality in this highly competitive and rapid changing world. Therefore special care and support system is very necessary to nourish the potentialities of Students. Self-concept is considered as a key to success so parents and educators should counsel and guide them to develop positive self-concept.

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