Research Paper

Self – Concept and Achievement Motivation as a Predictor of Academic Stress among High School Students of ICSE Board, Chennai

Pavithra Narasimhan[1]*

ABSTRACT

Various studies across the globe have emphasised that students are subjected to higher stress. Excessive stress could lead to psychological problems like depression and anxiety. The objective of the current study was to assess stress among students High school students.

The present study examined the relationship between self- concept, achievement motivation and academic stress among high school students. For the purpose of this study, data has been collected from 100 school students (boys - 50, girls - 50) who were in the range of 16 – 19 years using the random sampling method.

Self-concept Questionnaire developed by Raj Kumar Saraswath (1984) and Achievement Motive Test (ACMT) developed by Ray's Achievement (1990) and Academic Stress scale by Busari (2011) were used for the collection of data. The reliability of Self-concept questionnaire and Achievement Motive Test were 0.91 and 0.87 respectively. The investigator has adopted a survey method for this study. Pearson's product moment correlation is used to assess the association and independent 't' test was used to assess the differences among the variables and One – way Analysis of variance was used in the analysis of data.

Stress is the physical and mental response of the body to demands made upon it. It is the result of our reaction to outside events, not necessarily the events themselves. In our modern age of anxiety, many of us are so stressed out that it's hard to maintain focus on important goals. Stress is now conceptualized as, "the inability to cope with a perceived or real (or imagined) threat to one's mental, physical, emotional or spiritual well-being which results in a series of physiological reactions and adaptations" (Seaward, 2008).

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[1] (Assistant Professor, Department of Psychology – Patrician College of Arts and Science, Chennai, India)
*Responding Author

Self – concept is an idea of the self-constructed from the beliefs one holds about oneself and the response of others. It is a judgment of oneself as well as an attitude toward the self and encompasses beliefs about oneself. Self-concept is the construct that negotiates these two selves. In other words, it connotes first the identification of the ideal self as separate from others, and second, it encompasses all the behaviors vetted in the actual self that you engage in to reach the ideal self.

The actual self is built on self-knowledge. Self-knowledge is derived from social interactions that provide insight into how others react to us and the ideal self is the self that we imagined to be.

According to Baumeister (1999) provides the following self-concept definition:"The individual's belief about himself or herself, including the person's attributes and who and what the self is".

Stanley Hall (1904) described adolescence as a period of great "storm and stress", corresponding to the time when the human race was in a turbulent, transitional stage on the way to becoming civilized (Lama Majed Al-Qaisy and Jihad Turki, 2011). Adolescence is the period of heightened sensitivity for rapid learning and of critical acquisitions which determine the general style of adult life. Adolescence is the period of transition from a relative dependent childhood to the psychological, social and economic self-sufficiency of adulthood (Shubhangi Kamble, 2009). It is the time during which many developmental changes take place in the individual like the way he thinks, looks and behaves. Adolescence is the period of time when the surge of life reaches its highest peak (Jersild, 1963). Adolescence can be a time of high risk for children, where newfound freedoms can result in decisions that drastically open up or close off life opportunities. Achievement during this period can be a stepping stone for the forthcoming year. Only if an adolescent has good achievement motivation and self-concept he can succeed in life.

The self-concept is an important term for both social and humanistic psychology. Lewis (1990) suggests that the development of a concept of self-has two aspects:

The Existential Self
This is 'the most basic part of the self-scheme or self-concept; the sense of being separate and distinct from others and the awareness of the constancy of the self' (Bee, 1992). The child realizes that they exist as a separate entity from others and that they continue to exist over time and space.

According to Lewis awareness of the existential self-begins as young as two to three months old and arises in part due to the relation the child has with the world. For example, the child smiles and someone smiles back, or the child touches a mobile and sees it move.

The Categorical Self
Having realized that he or she exists as a separate experiencing being, the child next becomes aware that he or she is also an object in the world.

Just as other objects including people have properties that can be experienced (big, small, red, smooth and so on) so the child is becoming aware of him or herself as an object which can be experienced and which has properties The self too can be put into categories such as age, gender, size or skill.

In early childhood, the categories children apply to themselves are very concrete. Later, self-description also begins to include reference to internal psychological traits, comparative evaluations and to how others see them.

Carl Rogers (1959) believes that the self-concept has three different components:
• The view we have of yourself (self-image)
• How much value we place on yourself (self-esteem or self-worth)
• What we wish you were really like (ideal-self)

People with good self -concept tend to be more accepting of others. High self-esteem is related to independence and an open mind. The dissonance between a person's self-concept and actual experiences is a chronic source of anxiety and can even result in mental disorder

Achievement motivation, though it is present in varying degrees in all human beings, it is largely influenced by an individual's evaluation of self. Motivation is an important factor in everyday life. Our basic behaviors and feelings are affected by our inner drive to succeed in life's challenges. It also promotes our feelings of competence and self-worth as we achieve our goal. Higher or lower self-esteem impact an individual life meaning and in turn evaluation of his self -worth can significantly affect his Psychological state.

Need for achievement (N-Ach) refers to an individual's desire for significant accomplishment, mastering of skills, control, or high standards. The term was first used by Henry Murray and associated with a range of actions. These include: "intense, prolonged and repeated efforts to accomplish something difficult. To work with singleness of purpose towards a high and distant goal. To have the determination to win". The concept of N-Ach was subsequently popularised by the psychologist David McClelland.

David C. McClelland's and his associates' investigations of achievement motivation have particular relevance to the emergence of leadership. McClelland was interested in the possibility of deliberately arousing a motive to achieve in an attempt to explain how individuals express their preferences for particular outcomes—a general problem of motivation.

Need theory, also known as Three Needs Theory, proposed by psychologist David Mc Clelland, is a motivational model that attempts to explain how the needs for achievement, power, and affiliation affect the actions of people from a managerial context.

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The need for achievement theory by McClelland (1961), refers to an individual preference for success under conditions of competition and the need for achievements has been studied both at the individual and societal level. However, the main objective behind this theory is to understand characteristics of higher need achievers, the outcome associated with high need achievement and method of increasing the need for achievement. The theory posits that people with a high need for achievement tend to set moderately difficult goals, make moderately risky decisions, want immediate feedback, become preoccupied with their task and assume personal responsibility (Moorhead and Griffin, 1995). Furthermore, McClelland posits that proper training could greatly boost an individual's need for achievement and that a nation's level of achievement of economic prosperity correlates with its citizens need for achievement. Finally, just like every manifest need theory, need for achievement posits that these needs are not solely instinctive, rather they can be learned by people as they go about their day to day lives. It has been found that people with high self-esteem have performance expectations higher than those of low self-esteem (Atkinson, Bastian, Earl and Litwin, 1960; Covington and Omelich, 1979). No wonder, some undergraduates in university do better than others when faced with the same task, the probability of success estimate of high self-esteem people will, therefore, be higher than those of low self-esteem people. Although the two factors which are self-esteem and achievement motivation are completely independent, the warping of the probability of success of self-esteem correlates with achievement motivations. Thus, high self-esteem becomes a factor leading to good performance that justifies the initial achievement motivation. In addition, self-esteem is also supported by a number of articles showing that self-esteem correlates positively with educational and occupational accomplishment (Coopersmith, 1967).

Negative stress occurs when our ability to cope with life's demands crumbles. If we don't break down the stress chemicals (e.g. through physical activity), they stay in the blood, preventing us from relaxing. Eventually, this results in a permanent state of stress. That initial buzz turns to worry, irritability or panic. Challenges become threats; we doubt out the ability to do even simple things and problems appear insurmountable.

Aim:
- The goal of the study is to find the relationship between self – concept, Achievement motivation and academic stress among high school students.

Objectives:
The present study will focus on the following specific objectives:
1) To identify the causes of stress among students.

Significance of the Study
The outcome of the study will provide the basis for enhancing the general adoption of a new, positive approach to student life, thereby, ensuring academic success.

Hypotheses

The following were proposed hypotheses of the current study.

- There would be no significant relationship between Self-concept, Achievement motivation on Student's academic stress.(Hypothesis:1)
- There would be no significant difference between boys and girls on their Academic Stress(Hypothesis:2)
- There would be no significant difference between boys and girls on their Achievement motivation(Hypothesis:3)
- There would be no significant difference between boys and girls on Self - Concept.(Hypothesis:4)
- Self-concept and Achievement motivation are not predictors of academic Stress (Hypothesis: 5)
- There would be no significant difference on the mean average of the dependent variable (Academic stress) (Hypothesis:6)

REVIEW OF LITERATURE

Vishal Sood (2012) has investigated on the need for achievement, academic achievement and socio-demographic variables of high school students of Kullu and Manali districts of India. The results revealed that n-achievement positively and significantly affected academic achievement of high school students. The students with high n-achievement possessed significantly higher academic achievement as compared to students with average and low n-achievement. Girls were found to have significantly higher n-achievement in comparison to boys. However, no significant differences in n -achievement were found among rural and urban students as well as students belonging to nuclear and joint families.

Firouzeh Sepehrian Azar (2013) has investigated the relationship between self-efficacy, achievement motivation, academic procrastination as predictors of academic achievement in pre-college students. The results revealed that there was a significant difference between boys and girls in terms of the level of achievement motivation, academic achievement, and academic self-efficacy.

Dr. Barnabas E. Nwankwo, 2 Tobias C. Obi and 3 Solomon A. Agu (2013) examined the relationship between self-esteem and achievement motivation among university undergraduates. The sample consists of 100male and 100 female undergraduates from the University of Nigeria, Enugu campus (UNEC) with the age range of 18-35. A correlational design was used. Hudson (1982) 25-item index of self-esteem scale and Hermann (1970) 29-item achievement motivation scale were administered. Pearson product moment correlation coefficient statistics revealed a positive relationship between self-esteem and achievement motivation, r(198)=0.34 at p<.05.

METHODOLOGY

Size of the Sample

The total number of sample was 100. High school students of ICSE board were taken for the study.

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Research Design

The stratified sampling method was used and the data was collected through standardized tools. Pearson product moment correlation was used to compute the relationship between the variables and the independent simple 't'test, regression and ANOVA was used for analysis.

Variable

Independent variable

Self-concept and Achievement motivation were taken as Independent variable
Demographic variables were also considered in the study.

Dependent variable

Student's academic stress was the dependent variable.

Tools used:

1. Academic Stress scale:

Busari (2011) constructed and validated Student Academic Stress Scale (SASS).

The SASS is a measure of stress response developed specifically for quantifying stress.This scale has two sub-sections. Section A consists of demographic information such as sex, course, level, the type of secondary school attended, age, while section B consists of 50 items in the various domain of academic stress. Respondents rate how much of the time they experience symptoms on a 5-point Likert scale with the anchors none of the time (1) A little of the time (2) some of the time (3) most of the time (4) and all of the time (5) items are summed for subscale scores and subscales are summed for a total of SASS stress response score. Higher scores indicate a greater stress response. The SASS produced excellent reliability using Cronbach alpha for the overall SASS scale and subscales. And all alphas were above .80. This indicates that the SASS is a reliable measure of academic stress responses.

2. Self – Concept:

The Self-Concept questionnaire consists of 48 items and was developed by Dr. Raj Kumar Saraswath. It provides six separate dimensions of self-concept - physical, social, intellectual, moral, educational and temperamental. The reliability of Self-concept questionnaire was 0.91and this indicates the scale as a reliable measure of Self –concept responses.

3. Achievement motivation:

The Achievement Motivation Scale is a self-reporting scale developed by John Ray in 1990. It consists of 14 statements in question form in three possible modes of responses are provided, such as, "yes", "undecided" and "no". The reliability of Achievement questionnaire was 0.87 and this indicates the scale as a reliable measure of Achievement motivation responses.

TABLE AND DISCUSSION

Table 1: Relationship between Self – Concept, Achievement motivation on Academic stress

Partial Correlation:

Descriptive Statistics

	Mean	Std. Deviation	N
Self – concept	138.290	20.7750	100
Achievement motivation	30.530	7.3601	100
Academic stress	82.360	14.8851	100

Correlations

Control Variables			SCTRS	AMRS	SASRS
-none-[a]	Self – concept	Correlation	1.000	.310	.204
		Significance (2-tailed)	.	.002	.042
		df	0	98	98
	Achievement motivation	Correlation	.310	1.000	.279
		Significance (2-tailed)	.002	.	.005
		df	98	0	98
	Academic stress	Correlation	.204	.279	1.000
		Significance (2-tailed)	.042	.005	.
		df	98	98	0
Academic stress	Self – concept	Correlation	1.000	.269	
		Significance (2-tailed)	.	.007	
		df	0	97	
	Achievement motivation	Correlation	.269	1.000	
		Significance (2-tailed)	.007	.	
		df	97	0	

a. Cells contain zero-order (Pearson) correlations.

Self – concept (138.290 ±20.7750) and Achievement motivation (30.530 ±7.3601) at the same time controlling for students academic stress (82.360 ± 14.8851), which is strongly significant (r = 0.269, p – value < 0.01).

However, zero-order correlations showed that it is strongly significant, positive correlation between self-concept and achievement motivation (r =0.310, *p* < .002), indicating that student academic stress moderately influence in controlling for the relationship between self-concepts and academic achievement motivation.

Therefore, the Hypothesis:(There is no significant relationship between Self-concept, Achievement motivation on Student's academic stress is rejected)

Table 2: Difference between Boys and Girls on Academic Stress
  ➢ Alternative Hypothesis: There is a significant difference between boys and girls student on academic stress.

Group Statistics					
	GENDER	**Sample size**	**Mean**	**Std. Deviation**	**Std. Error of Mean**
Academic	Boys	50	75.840	12.0515	1.7043
stress	Girls	50	88.880	14.6853	2.0768

Independent Samples Test				
		t-test for Equality of Means		
		| t |	**df**	**Sig. (2-tailed)**
Academic Stress	Equal variances assumed	4.854	98	.000
	Equal variances not assumed	4.854	94.406	.000

Since p-value less than 0.05, we reject our null hypothesis at 0.01% level of significance and say that, there is a significant difference between boys and girls (gender) on academic stress.

Therefore, The Hypothesis 2 (There is no significant difference between boys and girls student on academic stress) is rejected and alternate Hypothesis is accepted.

Table 3: Difference between Boys and Girls on their Achievement motivation:

- ➢ Null Hypothesis: There is the insignificant difference between boys and girls student on their Achievement motivation.
- ➢ Alternative Hypothesis: There is a significant difference between boys and girls student on their Achievement motivation.

Group Statistics					
	GENDER	**N**	**Mean**	**Std. Deviation**	**Std. Error of Mean**
Achievement	boys	50	26.480	7.8409	1.1089
motivation	girls	50	34.580	3.8070	.5384

Independent Samples Test				
		t-test for Equality of Means		
		| t |	**df**	**Sig. (2-tailed)**
Achievement	Equal variances assumed	6.571	98	.000
motivation	Equal variances not assumed	6.571	70.887	.000

Since p-value less than 0.05, we reject our null hypothesis at 0.01% level of significance and say that there is a significant difference between boys and girls student on their Achievement motivation.

Therefore the hypothesis 3 (There is no significant difference between boys and girls student on Achievement motivation) is rejected and alternate Hypothesis is accepted.

Table 4: Difference between Boys and Girls on their Self – concept:
- ➢ Alternative Hypothesis: There is a significant difference between boys and girls student on their Self – concept.

Group Statistics					
	GENDER	N	Mean	Std. Deviation	Std. Error Mean
Self – concept	Boys	50	128.660	20.4367	2.8902
	Girls	50	147.920	16.2818	2.3026

Independent Samples Test				
		t-test for Equality of Means		
		| t |	df	Sig. (2-tailed)
Self – concept	Equal variances assumed	5.212	98	.000
	Equal variances not assumed	5.212	93.340	.000

Since p-value less than 0.05, we reject our null hypothesis at 0.01% level of significance and say that, there is a significant difference between boys and girls student on their Self – concept.

Therefore, the Hypothesis 4 (There is no significant difference between boys and girls student on their Self – concept) is rejected and the alternate hypothesis is accepted.

Table 5: Self-concept and achievement motivation doesn't predict academic stress

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.305[a]	.093	.074	14.3205

a. Predictors: (Constant), Achievement Motivation, Self-Concept

b. Dependent Variable: Academic Stress

Therefore, the Hypothesis 5 (Self-concept, achievement motivation doesn't predict academic stress is rejected)

Table 6: There is no significant difference on the mean average
ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2042.656	2	1021.328	4.980	.009[b]
	Residual	19892.384	97	205.076		
	Total	21935.040	99			

a. Dependent Variable: Academic Stress

b. Predictors: (Constant), Achievement Motivation, Self-Concept

Coefficients[a]		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
Mod		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	54.737	10.188		5.373	.000	34.517	74.958
	Self-Concept	.093	.073	.130	1.279	.204	-.051	.238
	Achievement Motivation	.483	.206	.239	2.347	.021	.074	.891

a. Dependent Variable: Academic Stress

IMPLICATIONS:

It is concluded that that positive self-concept and achievement motivation create Eu-stress among students, enabling them to optimize their fullest potential.

It is also concluded that there is a significant difference between male and female students in their level achievement and self -concept. The findings reported in this study justify the importance of self-concept and to improve self-concept will further lead to understanding of their capabilities, strengths, weaknesses, interests, attitude, aptitude, emotions, knowledge etc. this will finally lead them to develop a high level of achievement motivation.

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How to cite this article: Narasimhan, P. (2018). Self–Concept and Achievement Motivation as a Predictor of Academic Stress among High School Students of ICSE Board, Chennai. *International Journal of Indian Psychology*, *6*(3), 151-161. DIP: 18.01.014/20180603, DOI:10.25215/0603.014