

Influence of Gender and Academic Achievement on Self Concept among Secondary School Students

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ABSTRACT

The study is conducted to find the influences of Academic Achievement and Gender on the Self-Concept among secondary school students. The objectives of the study are a) to identify students with high and low academic achievement and b) to study self-concept of senior secondary class students. A sample of 226 students is selected through purposive sampling technique from C.B.S.E affiliated senior secondary schools selected randomly from Patiala district of Punjab. The data is collected through Self concept questionnaire (SCQ) by Dr. Raj Kumar Sarswat. The data has been analysed using a 2x2 factorial design and two way ANOVA was employed on various dimensions and total self-concept scores. The results showed that high achievers had scored more on 'temperamental', 'educational' dimensions of self-concept and total scores of self-concept than low achievers.

Keyword: - Academic Achievement; Gender; Self-Concept; Secondary school students

1. INTRODUCTION

In view of the tremendous rate at which change is taking place in the diverse spheres of human life and which is likely to accelerate in the present century, we need a vision to equip ourselves to meet the emerging challenges. In the present set up where the society is ever changing with advancement of science and technology, an individual's life is in turmoil and he is uncertain about his future. Future lies in the hands of children, so it is essential to infuse certain traits and qualities in them.

Education makes an attempt to develop man in terms of his multidimensional personality and behind this object there must be some aim because education is an ethical activity, it is unthinkable without aims, so in order to achieve one's aim one should have glorious academic record. The overall process of education of development of man involves academic achievement also.

1.1 Self-Concept

Self-concept is dominant element in personality pattern; therefore, the measurement of self-concept becomes essential. There are several terms that are virtually synonymous with self-concept; among them are self-image, the ego, self-understanding, self-perception and phenomenal self.

The innovation of the term 'self' can be traced in our Vedic literature. Later it was Self -means the way one conceives himself/herself. Self is not innate but gradually formed as a child grows by social interactions. 'Concept' -means the way by which one individual relate himself to his social environment both physical and psychological. 'Self-Concept' -means how an individual thinks of himself. It is one's concept of self, which personifies the individual as a whole.

In recent years there has been growing realization of the importance of self-concept in understanding of human behavior. Without knowing self, understanding of human behavior is incomplete and inaccurate.

The formation of self-concept is fundamental to the development of the individual's personality. Self-concept, as the name implies, is one's concept about oneself. As an individual grows, he not only forms concepts about his surroundings and other individuals, but also gradually forms an image or concept of himself.

The interaction between the individual and his total environment forms an image of his own self. He begins to realize his health, structure of the body, and his potentialities. Then he rates himself as high or low. This concept may be positive or negative. If the individual gradually becomes conscious of his superiority, his self-concept may be positive, but if he feels neglected and insecure he develops a negative self-image.

Self-concept is a central theme around which revolve a large number of major aspects of person's thoughts and feelings, hopes, fears and fantasies, his views of what he is, what he has been, what he might become and his attitudes pertaining to his worth (Jerild, 1960) [1]. Self-concept is more or less organized perceptual object resulting from present and past. It is the cognitive-affective map of an individual, which helps him in understanding oneself especially during moments of crisis or choices.

Self-concept is referred by Lowe (1961) as one's attitude towards self [2]. Sarswat and Gaur (1981) describe self-concept as the-The individual's way of looking at himself [3]. It also signifies his way of thinking, feeling and behaving.

Person's self-concept may be viewed as a store of self-perception. It consists of the answers of such questions as who am I? What are my strengths and weaknesses? Self-concept refers to the experience of one's being. It is an organized structure comprised of set of attitudes, beliefs and values that cut across all the face to face experiences and actions. Self is something of which one is immediately aware. It is warm, central private region of one's own life

People often infer their characteristics from their observed behaviour. They also use thoughts and feelings of other people for the formation of self concept. Finally people compare themselves to others, which helps in the formation of inferiority or superiority complex, which further helps in the formation of self-concept. We form multiple self-concepts with more knowledge and different attributes. Once formed self-concept directs once thoughts, feelings and actions. If once Self-Concept is formed it tends to resist change by new information and begins to regulate many aspects of our lives.

1.2 Academic Achievement

Academic achievement is one of the important goals of education. In case of students, we judge their knowledge, attainment and skills acquired in school subjects which are assessed by the authorities with the help of examination, which can be teacher made or standardized tests.

Academic achievement is the accomplishment or acquired proficiency in the performance of an individual in a given skill or body of knowledge. Achievement can be measured with the help of tests, verbal or written. Since academic achievement is a criterion for selection, promotion or recognition in various walks of life, the improvement of academic achievement can not be ignored. There are several factors that influence the academic achievement of an individual like his personality, intellectual ability and environment etc. Academic achievement is also influenced by demographic, cultural and environmental factors, which are of crucial importance. The word academic achievement has been derived from two words, Academic and Achievement.

Basavana (1971) conducted a study to investigate self-confidence as an attribute of self-concept [4]. The study was conducted on 300 college students and it was found that individuals who had high self-concept had higher general mental ability and self-confidence.

Mani and Gonsalves (1977) found teachers with more teaching experience had better self concept than teachers with less teaching experience and the relationship between self concept and teaching practice scores in general was not significant [5].

Shah (1978) found that there was no significant sex difference in self-concept at grade IX while the same was significant at the grade X. The girls as a group did not indicate higher positive self-concept and the relationship between self-concept and academic achievement was significantly positive and linear [6].

Sharma (1978) conducted a study on 1427 students (690 males, 737 females) and found that self-concept showed high positive relation with intelligence and self-concept of boys was higher than that of girls [7].

Goswami (1978) revealed that more intelligent adolescents tended to have brighter self-concept than less intelligent ones and there tended to be sex difference in the self-concept. He also found a positive relationship between self-concept and academic achievement [8].

Dutta (1979) studied that the effects of malnourishment on self –concept, personal- social adjustment and cognitive competence of boys coming from low income families [9].

Hirunval (1980) academic motivation as positively related to self- concept of pupils and the classroom climate show positive relationship[10].

Rani (1980) revealed that there was no difference in the self-concept and reflected self-concept of S.C students. A significant relationship existed between academic achievement and different aspects of self-concept and

reflected self-concept and academic performance and physical self –concept and reflected physical self-concept [11].

Sharma (1981) found that primary school teachers perceived themselves to be better achievers than the college teachers while the differences between the primary and secondary school teachers were not significant [12]. Differences on self concept about achievement of rural and urban teachers were not significant. Also differences on achievement concepts of male and female teachers were significant and values structures of the various groups of the teachers were also significantly different.

Manav (1981) found professional students perceived themselves more confident than non-professionals and none of self-concept variables was found to be significantly related to the student's achievement [13].

Gupta (1984) studied that there was some relationship between self- concept, anxiety, dependency and adjustment for experimental group [14]. Self- concept and adjustment are positively correlated and had negative correlation with anxiety.

Agarwal (1985) found that self –concept is not related with moral development and moral under development, personality is not related with moral development and there was no significant relationship between self- concept and personality characteristics [15].

Chadda (1985) conducted a study on 150 teachers and found that there was no significant difference between the self-concept scores of male and female and rural and urban sub-groups of teachers [16].

Srivastava (1988) found no correlation of aggression with self-concept, achievement motivation and academic as well as non-academic achievement [17]. There was a curvilinear relationship of aggression with self-concept and academic as well as non-academic achievement. Both academic and non-academic performance did not contribute anything to aggression independently or in combination.

Shanmugasundram (1983) investigated into factors related to academic achievement among undergraduate students and reported that high achievers had better self-concept than low achievers [18].

Swami (1989) found that normal students are better adjusted, have better self concept and higher intelligence as compare to orphan students [19]. Sex has no effect on the difference of adjustment, intelligence and self concept of orphan and normal students.

Pandey (1989) found a significant relationship between divergent thinking and cognitive style, self concept and intellectual pattern and scholastic pattern [20].

Kumari (1990) found that undergraduate girls were in general more modern than undergraduate boys and differed significantly in respect to all the four areas of modernity [21]. As self concept increased in undergraduate boys and undergraduate girls there was significant increase in modernity. Self concept in general was propellant to modernity.

Asha and Johnson (1997) mentioned that urban and rural students with better self-concept were homologous w.r.t. their emotional maturity [22]. Among students having high self-concept, those from urban background were seemed to be vocationally more mature than those from rural background.

Ramkumar (1997) found community, area of residence, personal and social adjustment of students found to be more contributing factor for acute self-concept [23].

Singh (2004) studied the difference in hostellers and non-hostellers on various dimensions of self-concept [24]. Hostellers were found better on dimensions of behavior of intelligence and social status, physical appearance and popularity, whereas non-hostellers were found to be happier and satisfied than the hostellers.

1.2 Significance of the Study

As the result of study of behavioral sciences we have come to know, how and why people react, in varied socio-economic, cultural, psychologically and emotionally complex situations. There is a significant dearth of research material on self concept. Self-concept affects the dimensions of one's personality, behavior and academic achievement. Self-concept directs one's behavior of influencing one's thoughts, feelings and actions. Every body has his own self-concept due to which individual differences exist. As a result there are different adjustments as well as academic problems. Self-concept develops different potentialities in different social, economic, psychological and educational, backgrounds and accordingly are formed their self-concepts. Studies have found that students who form weak self-concepts show weak academic performance and adjustment to different social situations than one's that form strong self-concepts.

So, the result of present study will dwell light on the importance of monitoring, regulating and boosting the self-concept, so that they can perform better in their academic fields. Thus the present study is of great significance in the field of education. So the investigator has selected the present study of Self-concept in relation to Academic Achievement and gender.

1.3 Objective

The present study endeavors to study the influences of gender and academic achievement on the self-concept of students.

1.4 Hypotheses

In order to realize the objectives of the study the following hypotheses have been formulated:

- 1) There is no significant difference between the various dimensions and total self concept scores of high and low achievers.
- 2) There is no significant difference between the various dimensions and total self concept scores among boys and girls.
- 3) There is no interaction effect on the various dimensions and total self concept scores with respect to sex and academic achievement

2. METHODOLOGY

2.1 Research Design

A 2x2 factorial design was employed on self-concept scores. Self-concept of senior secondary school students is studied as dependent variable and academic achievement and gender are studied as independent variable. The design is replicated six times on various dimensions of self-concept i.e. Physical, Social, Temperamental, Educational, Moral, and Intellectual.

2.2 Procedure

Firstly the sample of 226 students was selected through purposive sampling on the basis of their academic achievement scores from senior secondary schools affiliated to C.B.S.E, Delhi from Patiala district. The marks obtained in X class board examination was taken as academic achievement scores. Self-concept questionnaire were administered to students to get self-concept scores. After the collection of data, the academic achievement scores of the students were put in descending order. The range of the academic achievement scores of the students was from 518-243. For finding high and low achievers .30 and .70 percentiles were calculated, the scores at .30 and .70 percentile were 392 and 450 respectively. The students having marks below 392 and above 450 were assigned as low and high achievers. On the basis of that, the sample consisted of 84 boys (high achievers- 60 and low achievers- 24) & 86 girls (high achievers- 24 and low achievers- 62). After this the data obtained was subjected to statistical analysis.

2.3 Tools

Self concept questionnaire (SCQ) by Dr. Raj Kumar Sarswat has been used to conduct the study. It measures self concept on six separate dimensions viz., Physical, Social, Temperamental, Educational, Moral and Intellectual. Total of all dimensions becomes the total self-concept score.

2.4 Statistical Techniques

Following statistical techniques were used to analyze the data:

- 1) Descriptive statistics was used to understand the nature of the data.
- 2) Two way ANOVA was employed on the scores of various dimensions of self-concept and emotional intelligence.

3. RESULTS

The means of sub groups for 2x2 design of ANOVA on the scores of various dimensions and total self-concept has been calculated and presented below in the table 1. The acronyms used for better perspective are: L.A: Low achievers; H.A: High achievers.

Table 1
Means Of Sub-Groups Of Anova For 2x2 Design With Respect To Various
Dimensions And Total Self-Concept

		Boys	Girls	
PHYSICAL	H.A	M ₁ = 30.208	M ₂ = 29.016	MM ₁ = 29.61
		σ ₁ = 4.88	σ ₂ = 3.46	
	L.A	M ₃ = 29.267	M ₄ = 28.75	MM ₂ = 29.01
		σ ₃ = 4.59	σ ₄ = 3.43	
		MM ₃ = 29.74	MM ₄ = 28.88	
SOCIAL	H.A	M ₁ = 31.125	M ₂ = 30.419	MM ₁ = 30.77
		σ ₁ = 3.455	σ ₂ = 4.222	
	L.A	M ₃ = 29.8	M ₄ = 29.75	MM ₂ = 29.77
		σ ₃ = 4.974	σ ₄ = 4.494	
		MM ₃ = 30.46	MM ₄ = 30.08	
TEMPERAMENTAL	H.A	M ₁ = 30.958	M ₂ =30.677	MM ₂ =30.81
		σ ₁ = 2.911	σ ₂ =3.496	
	L.A	M ₃ = 29	M ₄ =28.20	MM ₂ = 28.60
		σ ₃ = 4.599	σ ₄ = 3.788	
		MM ₃ = 29.97	MM ₄ = 29.44	
EDUCATIONAL	H.A	M ₁ = 30.167	M ₂ = 29.967	MM ₁ = 30.06
		σ ₁ = 4.06	σ ₂ = 3.397	
	L.A	M ₃ = 28.55	M ₄ = 27.083	MM ₂ = 27.81
		σ ₃ = 4.949	σ ₄ = 3.49	
		MM ₃ = 29.35	MM ₄ = 28.52	
MORAL	H.A	M ₁ = 30.542	M ₂ = 30.065	MM ₁ = 30.30
		σ ₁ = 3.635	σ ₂ = 3.571	
	L.A	M ₃ = 29.667	M ₄ = 29.875	MM ₂ = 29.77
		σ ₁ = 4.516	σ ₄ = 3.152	
		MM ₃ = 30.10	MM ₄ = 29.96	
INTELLECTUAL	H.A	M ₁ = 27.161	M ₂ = 26.613	MM ₁ = 26.88
		σ ₁ = 3.497	σ ₂ = 3.582	
	L.A	M ₃ = 26.117	M ₄ = 26.333	MM ₂ = 26.22
		σ ₃ = 4.11	σ ₄ = 3.875	
		MM ₃ = 26.63	MM ₄ = 26.47	
SELF-CONCEPT	H.A	M ₁ =180.16	M ₂ =176.75	MM ₁ = 178.46
		σ ₁ =15.053	σ ₂ =13.875	
	L.A	M ₃ =172.24	M ₄ =170	MM ₂ = 171.20
		σ ₃ =19.615	σ ₄ =15.14	
		MM ₃ =176.28	MM ₄ =173.37	

In order to analyze the variance of 'physical' dimension of self-concept of students, the obtained scores were subjected to ANOVA and the results have been presented in the table 2.

Table 2

Summary Of Anova For 2x2 Design With Respect To Physical Dimension Of Self-Concept

Dimensions of Self concept		Physical		Social		Temperamental		Educational	
S.O.V	Df	MSS	F-Ratio	MSS	F-Ratio	MSS	F-Ratio	MSS	F-Ratio
Academic Achievement	1	2.244	0.134	29.31	1.489	166.93	11.069**	152.16	9.0497**
Gender	1	14.99	0.896	0.123	0.0063	7.815	0.518	0.967	0.0575
Interaction	1	14.18	0.848	8.534	0.4338	4.2943	0.2848	36.593	2.1764
SS _B	3								
SS _W	166	16.73		19.68		15.081		16.814	
Dimensions of Self concept		Moral		Intellectual		Self-Concept			
S.O.V	Df	MSS	F-Ratio	MSS	F-Ratio	MSS	F-Ratio		
Academic Achievement	1	9.447	0.628	14.74	1.0229	1527.2	5.67724**		
Gender	1	0.383	0.025	0.594	0.0412	2.721	0.0101		
Interaction	1	4.300	0.286	5.517	0.3829	297.05	110,422		
SS _B	3								
SS _W	166	15.05		14.41		269.01			

** Significant at 0.01 level of confidence

* Significant at 0.05 level of confidence

Main Effects

Academic Achievement

It has been observed from the table 2 that the F-ratio for the difference between the means of high and low achievers on the 'temperamental', 'educational' dimensions of self-concept and total scores of self-concept has been found to be significant at 0.01 level of significance. Thus, the data provide sufficient evidence to reject the hypothesis (1) namely, "There is significant difference between the self-concept scores of high and low achievers". From the respective means analysis, it is found that high achievers had scored more on 'temperamental', 'educational' dimensions of self-concept and total scores of self-concept than low achievers. This means that high achievers are having higher self concept as compared to low achievers. Specifically, the temperamental and educational aspects of self concept are higher among high achievers than low achievers.

Gender

It has been observed from the table 2 that the F-ratio for the difference between the means of boys and girls on the scores of various dimensions of self-concept and total self-concept has been found to be insignificant even at 0.05 level of confidence. Thus, the data did not provide sufficient evidence to reject the hypothesis (2) namely; "There is no significant difference between the self-concept scores of boys and girls".

Two Order Interaction

It has been observed from the table 2 that the F-ratio for the interaction between academic achievement and gender has been found to be insignificant even at 0.05 level of confidence. Thus, the data did not provide sufficient evidence to reject the hypothesis (3) namely; "There is no interaction effect of gender and academic achievement on the various dimensions and total self-concept".

4. CONCLUSION

From the above results it can be concluded that high achievers are having higher self concept as compared to low achievers. Specifically, the temperamental and educational aspects of self concept are higher among high achievers than low achievers. As compared to this Adsul (2011) reported there is no significant difference between high & low achievers on self-concepts except on intellectual self-concept [25]. Secondly, Gender is not found to influence the self concept of students. Contrarily, Joshi and Srivastava (1999) also reported that Boys would score significant higher on self-esteem as compared to girls [26]. However, the combined influence of gender and academic achievement on the various dimensions and total self-concept is not found significant.

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BIOGRAPHY



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