

## Relationship between Self Concepts and Students' Academic Achievements in Selected Medical Colleges

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### Abstract

This cross-sectional descriptive study was conducted to explore the relationship of medical students' self-concept with their academic achievement. The study population was preclinical second year medical students. Study was carried out at one government and one non-government medical colleges in Dhaka. Sample size was 254 and sampling technique was purposive.

The three dimensions of self concept: personal, family and social self-concept of medical students were assessed through 45-items questionnaire, which was answered on a five-point Likert scale. Data was collected by self administered structured questionnaire with Bengali version.

Academic achievement data were measured by two term examinations marks of three subjects (Anatomy, Physiology & Biochemistry) based on written and oral examinations.

Simple statistical tests were used to analyze the dominant dimension of student's self-concept. Inferential statistic such as t-test was used to analyze the difference between the self-concept and gender. Pearson correlations were used to analyze the relationship between self-concept of students with their academic achievement.

The participant's age ranged from 17 - 23 years with a mean of 19.8 and a standard deviation of 0.93. Among the respondents 47% were male and 53% were females. In term-I and term-II exams majority (66.9% and 66.1%) student were high achievers. The research finding showed that the dominant dimension of self concept was family self-concept (mean value was 53.73). Beside that, t-test analysis showed that there was significant difference between dimension of self-concept of students according to gender ( $p= 0.03$ ,  $p= 0.02$ ). Pearson correlations analysis showed that there was positive correlation between dimensions of self-concept with student's academic achievement.

Study recommended to increase the student's self-concept in order to enhance their academic achievement.

### Introduction

A good and strong education plays an important role in creating an honorable society and moulding the young generation to become useful citizens who could help in the economic, social, cultural and political development of the society (Cheryl S, 2007).

Academic performance is in general the yardstick used to measure the success of an individual. Excellent academic performance is the hope and pride of each and every student. Besides, it is also the hope of parents, teachers and educational institutions at large (Azizi Y 2009, Claes 2003).

For excellent academic performance, a student ought to acquire an understanding and a grasp of the subject content. This process of acquiring a command and an understanding of the subject content does not depend on merely on

memory work but on some non-cognitive factors include self-concept, self-efficacy and other student perceptions (Carter, 2006).

Self concept is the way an individual perceives himself and his potential to evaluate his strength and weakness. A student's confidence and the ability to express him and interact in the classroom are closely related to self-concept. Every individual is born unique and no one is quite the same as the other. According to Mizan Adillah et al (2000), this difference will cause individuals to have different dimensions of self concept of themselves.

Dornbusch et al (1987) stated that, there are opinions which stated that students who are an extrovert acquire better performance compared to introvert students, and vice versa. Thus, the personal self concept is seen as having a relationship with one's academic performance.

According to Gadeyne (2004) to develop the student's positive self concept, parents need to provide a harmonious household climate, full of happiness and have adequate necessities. Henny M. W. Bos, (2007) showed significant correlations between parental characteristics and child adjustment. A study of Pamela Garzarelli revealed that living

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with a stepparent was associated with poorer academic achievement among academically weak students.

According to Mrug S (2002), the integrated students with a disability would show more positive self-concept than those educated in segregated settings. From this study we can hypothesized that for better self concept development, integration among students, family and peers are needed.

The present study sought to extend these ideas by seeking additional correlates of academic achievement, including personality behaviors, the family environment and social circle among the students.

### Statement of the Problems

According to researchers, when they observed teaching and learning, it is obvious that some students have positive self concept. They are actively involved in the learning process. While some students are quite passive and quiet. This situation occurs because their action is influenced by the students' self concept. The establishment of self concept depends on various factors such as family background, friends, and colleagues. All this factors are related to one another.

Thus in this study, researchers are to examine the self concept dimension such as family, personal and social impact. The researchers also want to see whether there is a significant relationship between dimensions of self concept with the students' academic achievement.

### Aim and Objectives

This study is aimed to identify the relationship between self concept dimensions with the students' academic achievement.

Specific objectives of this study are:

1. To identify the dominant factors of self concept dimensions such as personal, family and social circle among the students.
2. To identify the existed type of self concept, such as positive self concept or negative self concept among students.
3. To identify the level of academic achievement among Students.
4. To identify whether there is a significant relationship between self concept dimensions such as personal, family and social, with the students' academic

#### a) The dominant Factors of self concept dimension (N = 254)

Self concept Dimensions	Minimum	Maximum	Mean	SD	Overall Mean
Personal Self concept	35	67	52.28	6.308	3.48
Family Self concept	20	60	53.73	6.73	4.48
Social Self concept	23	68	52.56	7.022	3.50

achievement.

### Research Question

- a) What is the dominant factor of self concept dimension such as personal, family and social circles among the students?
- b) What type of self concept do the students have, either positive self concept or negative self concept?
- c) What is the academic achievement among students?
- d) Is there any significant relationship between self concept dimensions, such as personal, family

and social circles among the students, with their academic achievement?

### Limitations of the Research

Medical colleges and the students were selected purposively according to convenience. All medical colleges could not be included. The medical colleges were chosen because of their near location. Thus, it makes the data collecting process easier and also saves cost. This is important because there are limitations of time and cost in doing this research. On the other hand, this study is only focusing to three self concepts dimension such as family, social, and personal, generally based on the most dominant self concept dimension, in the previous study.

### Methodology

This study is a descriptive study that aims to identify the relationship between self concept with the academic achievement of medical students. Respondents were selected randomly, from two medical colleges in Dhaka. The data was obtained using set of questions on self concept, used as instruments of the study (Azizi Yahaya, Shahrin Hashim, Jamaludin Ramli, Yusof Boon and Abdul Rahim Hamdan, 2006).

Further on, the study data is analyzed using the Statistical Package for Social Sciences (SPSS) version 11.5. Descriptive analysis is used, such as mean, percentage, frequency and standard deviation. The inferences analysis that is being used is Pearson correlation, to see the relationship that exists based on the study hypothesis. While t-test is used to see the difference between self concept and gender.

### Findings of the Study

**Table a** shows the overall mean for self concept dimensions among students. Based on the study analysis, the family self concept dimension has the highest overall mean value (4.48) compared to overall mean for personal self concept (3.48) and social self concept (3.50).

#### b) Types of Self Concept among Students (N = 254)

Type of Self concept	Number	Percentage
Positive	252	99.2
Negative	2	08
<b>Total</b>	<b>254</b>	<b>100</b>

**Table b** shows the level of self concept among students in two selected medical colleges. Most of the students have positive self concept (99.2 percent out of 254 students).

#### c) The level of academic achievements among students (N = 254)

Academic Achievements	Frequency	Percentage
High achievers	161	63.4
Medium achievers	66	26.0
Low achievers	27	10.6
<b>Total</b>	<b>254</b>	<b>100</b>

**Table c** shows the academic achievement of the students in two selected medical colleges. Out of 254, 161 students (63.4 percent) are high achievers, while 66 students (26 percent) are average achievers and 27 students (10.6 percent) are low achievers.

#### d) Pearson Correlation between personal self concept with the students' academic achievement

Self concept	Academic Achievement Term - I (n=254)		Academic Achievement Term - II (n=254)	
	Pearson Coefficient correlation r	Sig (2 tailed) p	Pearson Coefficient correlation r	Sig (2 tailed) p
<b>Personal</b>	0.063	0.318	0.143	0.023

\* Correlation is significant at the 0.05 level (2-tailed).

**Table d** showed the Pearson correlation between personal self concept with the students' academic achievement. Analysis finds the coefficient, r is 0.063 and p = 0.318 in Term I and r is 0.143 and p = 0.023 in Term II examination. Though the findings were significant only in term II exam ( $p < 0.05$ ).

#### e) Pearson Correlation between family self concept with the students' academic achievement

Self concept Dimension	Academic Achievement Term - I (n=254)		Academic Achievement Term - II (n=254)	
	Pearson Coefficient correlation r	Sig (2 tailed) p	Pearson Coefficient correlation r	Sig (2 tailed) p
<b>Family</b>	0.145(*)	0.021	0.113	0.071

\* Correlation is significant at the 0.05 level (2-tailed).

**Table e** showed the Pearson correlation of family self concept with the students' academic achievement in Term I and Term II examination. Analysis finds the coefficient, r is 0.145 and p = 0.021 in Term I and r is 0.113 and p = 0.071 in Term II examination.

#### f) Pearson Correlation between social self concept with the students' academic achievement

Self concept Dimension	Academic Achievement Term - I (n=254)		Academic Achievement Term - II (n=254)	
	Pearson Coefficient correlation r	Sig (2 tailed) p	Pearson Coefficient correlation r	Sig (2 tailed) p
<b>Social</b>	0.128(*)	0.043	0.073	0.247

\* Correlation is significant at the 0.05 level (2-tailed).

**Table f** showed the Pearson correlation between social self concept with the students' academic achievement in Term I and Term II examination. Analysis finds the coefficient, r is 0.128 and p = 0.043 in Term I and r is 0.073 and p = 0.247 in Term II examination.

## Discussion

Outcome of the study revealed that family self concept is the most dominant among the students. This study is similar to a study Marsiglia, C. S. (2002) which also concluded the same. This shows that the students who feel their presence are being accepted, needed, being loved and appreciated, would in turn have high respect to their families.

Analysis of the study shows that, majority of students have positive self concept. Study by Sharifah (1998) also concluded that majority of students have positive self concept. They will always have the chance to gain more success than failure. This is because they feel appreciated and receive good support from others.

Findings of the study also showed that, majority of the students have excellent academic achievement. This may be because they received good attention and care, high

appreciation from their peers, parents and the students around them; enabling them to improve their self concept and have positive impact on their learning process. These findings are contrary to the study by McClun, L. A (1998) which concluded that only a minority of the students are excellent achievers and also a minority of them still performed less than satisfactory.

## Recommendation

Students should be exposed to motivation talks and seminars. They should also undergo leadership training where they could build self confidence, independence and build their self esteem, identity and the team spirit to train them to interact with the people of the community.

## Conclusion

Findings revealed that on the whole majority of students have high level of positive self concept. From the above findings it may be concluded that factors like self concept does have effect on the students' academic achievements. Thus, level of positive self concept helps students in achieving excellent results. This may be because they received proper care and monitoring, high degree of appreciation from their peers, parents and teachers. Furthermore, the surrounding environment enabling them to improve their self concept and have positive impact on their learning process.

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