

Original Research Article

A cross-sectional study of relationship between self-esteem and self-concept of students of medical sciences

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ABSTRACT

Background: Identification of the role of factors such as self-esteem and self-efficacy and the investigation of their relationship among students can bring about improvement of educational planning and enhance the teaching outcome. This study aimed at investigating the relationship between self-esteem and self-efficacy among the students of medical sciences.

Methods: The present study is an analytical-descriptive which was conducted as a cross-sectional study on 394 students of Fasa University of Medical Sciences in 2016. In order to collect the data two questionnaires were used namely, Coopersmith Self-Esteem Inventory (CSEI) and Rogers Self-concept Questionnaire. The data were analyzed using SPSS 22. The researchers used descriptive and inferential statistics such as t-test, chi-square one-way ANOVA, and correlation to analyze the data.

Results: The mean and the standard deviation of self-esteem scores of female and male students were 38.23 ± 6.80 and 37.51 ± 6.67 respectively. The mean and the standard deviation of self-concept scores of female and male students were 9.49 ± 3.53 and 9.43 ± 4.14 respectively. The mean of self-concept scores of students of different majors had statistically significant difference with each other (0.011), whereas there was no statistically significant difference in self-esteem scores among students with different majors (0.442).

Conclusions: Considering the statistically significant difference in students' self-concept scores in different majors, it is suggested that we take right approaches to the improvement and enhancement of individuals' self-concept and the creation of positive feedback.

Keywords: Medical students, Self-esteem, Self-concept

INTRODUCTION

Self-esteem is the sense of value, degree of approval, affirmation, and a feeling of self-acceptance and self-worth that individuals have toward themselves.¹ Self-esteem is derived from social life and its values and presents itself in all stages of everyday life activities, that's why it is considered as one of the important aspects of human personality and a determinant of behavioral

traits.² Since self-esteem is the most important factor in the process of psychological growth and has remarkable effect on thoughts, feelings, desires, values, and goals. The more an individual fail in gaining self-esteem, the more they are likely to undergo feelings of anxiety, mental instability and suspicion about themselves, truth avoidance, and the sense of inadequacy.³ A person who has a high sense of self-worth can easily cope with threats and anxiety-inducing events of life without any negative

arousal experience and psychological disintegration.⁴ In a study, Kubota et al. mentioned that self-esteem affects patterns of success, performance, interaction with others, and psychological health. That is why it is necessary to enhance the positive evaluation of one's self.⁵ Coopersmith introduced self-esteem as a personal evaluation which is usually preserved through paying attention to one's self. Individuals with higher levels of self-esteem tend to focus on their strengths. Also, they are more prepared to accept their positive assessments, whereas those with lower levels of self-esteem tend to accept negative assessments.^{6,7}

In addition, self-esteem scores have been used to predict academic achievements.⁸ Self-esteem is a component of self-concept which includes cognitive, behavioral, and emotional aspects. Research studies have shown that self-esteem grows as an individual respond to others' reactions especially adults and parents.^{9,10} Self-concept refers to an individual's attitudes, feelings, and knowledge about their abilities, skills, and social acceptability. Self-concept encompasses all cognitive, emotional, and assessing dimensions. This psychological-personality dimension is formed based on previous judgements, perceptions and others' feedbacks in their life.¹¹ The results of the studies have shown that self-concept varies by gender. Additionally, it has been found that there is a positive relationship between academic success and achievement motivation, locus of control and self-concept so that the higher the motivation and the higher the inner locus of control and self-concept, the higher the academic success.^{12,13}

Results of the study done by Roge and Renzull showed that gender did not have any significant impact on students' self-concept. However, there was a statistically significant difference between females and males regarding their self-concept because of getting equal feedback from the environment.¹⁴ Thompson and Ungerlider reported the self-esteem of girls to be more than that of boys and they believed that the cause of girls' success was their higher level of self-confidence and lower level of anxiety.¹⁵ The studies indicate the role and importance of self-concept and self-esteem in different stages of life such as education, occupation, social environment, and the mental health of an individual. The discrepant results of the studies done on self-concept and self-esteem have encouraged the researchers of the present study to investigate the relationship between self-esteem and self-concept of students at Fasa University of Medical Sciences.

METHODS

The present study is an analytical-descriptive which was conducted as a cross-sectional study on 394 students at Fasa University of Medical Sciences in 2015. Samples included all students studying at Fasa University of Medical Sciences in the academic year 2016 in doctoral, bachelor's and associate's levels. Census sampling was

used in this study and the students were explained about the aims of the study and were asked to give their written consent to take part in this study. The instruments used in this study were Coopersmith Self-Esteem Inventory (CSEI) and Rogers Self-concept Questionnaire. Coopersmith Self-esteem Inventory was devised in 1967 by Coopersmith in order to assess students' worthiness in social and academic fields. This questionnaire comprises 58 items which describe individuals' beliefs or reactions. Self-esteem Scale was provided to assess individuals' feedback toward one's self in social, family, educational, and personal fields and a dimension named "lie" has been added to it. In this questionnaire, the participants were required to select "yes" or "no" to answer questions. The items of each subscale are as follows: general scale has 26 items, social scale 8 items, family scale 8 items, educational scale 8 items, and lying scale 8 items. The scores of subscales and the total score paves the way for individuals who have a positive image toward themselves. This questionnaire can be administered individually or in groups. In order to measure students' self-concept, the researchers used a standardized questionnaire named Rogers Self-concept questionnaire whose validity and reliability have been confirmed in Iran and other countries.⁶ This questionnaire comprises 2 parts. In part A, an individual's attitude toward his real self and in part B, and individual's attitude toward his ideal self is assessed. The absolute value of the difference between part A and part B yields a number. If the difference between part A and part B is less than 7, it shows that the self-concept is positive, and if it is 7 or more than 7, it indicates that the self-concept is negative.^{6,7} Having collected the data, the researchers analysed them using SPSS 22. The researchers used descriptive and inferential statistics such as t-test, chi-square, one-way ANOVA and correlation to analyse the data. The significance level was set at $P < 0.05$.

RESULTS

Among the 394 participants, 152 of them were males (38.6 %) and 242 of them were females (61.4 %). The results showed no significant difference between self-esteem and self-concept of students regarding their gender (Table 1).

Table 1: Comparison of students' self-esteem and self-concept scores with regard to gender.

	Female	Male	t-test
	Mean ± SD	Mean ± SD	
Self-esteem	38.23 ± 6.80	37.51 ± 6.67	0.997
Self-concept	9.49 ± 4.32	9.43 ± 4.14	0.254

According to Post-hoc test, there was a statistically significant difference between the self-esteem score of students of Medicine and Nursing (0.004), Medicine and Anesthesiology (0.001), Nursing and Operating Room (0.027), and Anesthesiology and Operating Room (0.008) (Table 2).

Table 2: Comparison of students' self-esteem and self-concept scores with regard to field of study.

Field of Study	Self-esteem	Self-concept
	Mean \pm SD	Mean \pm SD
Medicine	38.99 \pm 5.96	8.33 \pm 3.31
Nursing	37.17 \pm 6.95	10.02 \pm 3.94
Operating Room	37.92 \pm 6.21	8.58 \pm 3.27
Anesthesiology	37.48 \pm 7.80	10.49 \pm 4.11
Public Health	36.39 \pm 9.26	10.08 \pm 3.87
Laboratory Sciences	38.71 \pm 6.22	9.15 \pm 3.23
Emergency Medicine	38.86 \pm 5.26	9.52 \pm 4.14
ANOVA	0.442	0.011
Total	37.95 \pm 6.75	9.47 \pm 3.77

Findings of the study indicated that there was no statistically significant difference relationship between gender, marital status, field of study, appearance satisfaction, and general satisfaction (Table 3).

Table 3: The relationship of students' demographics with self-concept and self-esteem.

	Self-esteem	Self-concept
Gender	0.281	0.565
Marital Status	0.890	0.057
Field of Study	0.453	0.151
General Satisfaction	0.077	0.152
Appearance Satisfaction	0.035	0.044

The results of the study also showed that there was a significant relationship between major satisfaction and field of study ($P=0.000$), appearance satisfaction and field of study ($P=0.110$), but there was no significant relationship between gender and general satisfaction ($P=0.121$), and gender and appearance satisfaction ($P=0.054$).

DISCUSSION

The present study aimed at investigating the relationship between self-esteem and self-concept. The results indicated that there was no significant difference between students' self-concept regarding their gender. The results of the studies done by Feldhusen and Nimolos, Hoge and Renzulli, and Tamanifar et al, showed that there was no significant difference between students' self-concept regarding their gender.^{16,14,17} It can be inferred that one of the reasons for lack of relationship between self-concept and students' gender is getting equal feedback from the environment.⁶ Hoge and Renzulli indicated that gender did not make any significant impact on students' overall self-concept, though a lot of differences can be observed in male and female students' self-concept.¹⁴ Cultural, social, and family factors might bring about some differences in forming male and female students' attitudes and self-concept.⁶ Investigating the relationship between self-esteem and gender showed that no statistically significant difference between males and

females regarding their self-esteem. This finding is in line with that of Poorshafei, Westhves et al, and Joseph et al, and it is inconsistent with that of Janati et al, Thompson et al, and Tamanaifar et al.^{15,17-21}

It seems that this difference might be due to cultural differences and differences in individuals' attitudes toward males and females. Another possible reason for lack of relationship between self-esteem and gender might be getting equal feedback from the environment. In other words, cultural differences have faded away and girls and boys are treated the same. Also, the mentality that universities inculcate can be a source of such lack of difference.⁷ On the other hand, some researchers believe that the concept of "self" is different among men and women, therefore their level of self-esteem cannot be compared with certainty.⁶

The results of this study also showed that there was a statistically significant difference between the self-concept mean scores of students of Medicine and Nursing, Nursing and Operating Room, Anesthesiology and Operating Room (0.008). Since self-concept is formed based on previous judgements, perceptions and others' feedback, and since an individual's perception about their ability in learning is one of the accepted types of academic behavior, it can be influenced by field of study, judgements, and others' feedback, and therefore it might make significant differences.²²

CONCLUSION

Since self-esteem and self-concept can motivate and, if they are low, demotivate people, those who have higher levels of self-esteem and self-concept, are more resistant to problems and have greater perseverance, and therefore are more likely to succeed. Thus, considering the significant differences in self-concept of students with different fields of study, which might affect students' academic achievement, using some strategies can improve their academic achievement through enhancing their self-concept and providing positive feedback. Therefore, university professors should pay attention to students' self-concept and strengthen their attitudes toward them and prevent them from making negative attitudes toward themselves. Accepting students' strengths and weaknesses by professors help them have a real image of themselves which can lead to their academic success.

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