



Self-Esteem and Academic Achievement Among Students of Kermanshah University of Medical Sciences

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Abstract

Self-esteem is one of the most important psychological determinants. This study aimed to determine the level of self-esteem and its association with academic achievement among students of Kermanshah University of Medical Sciences (KUMS). This cross-sectional study was carried out among 300 students in KUMS in 2016. The sample population was selected using probability proportional-to-size method in all faculties. Participants filled out a self-reporting questionnaire. Data were analyzed using SPSS version 20 with t-test, one-way ANOVA and Pearson correlation statistical tests at 95% significant level. We found that MD students had higher self-esteem ($P < 0.017$). There was a significant relationship between mother's education level and self-esteem ($P < 0.001$). In addition, self-esteem was significantly correlated with academic achievement ($r = 0.292$). From our results, it appears that planning psychological interventions to increase levels of self-esteem may be useful in promoting academic achievement.

Keywords: Self-Esteem, Academic Achievement, Medical Sciences, Students

1. Background

Personality traits are the most influential factors on academic achievement among students; self-esteem is one of the most important factors for progress, talent and creativity development, and has caught the attention of many psychologists and researchers in recent decades (1).

Self-esteem is an aspect of self-concept cultivated in interactions with others, and in judgments that are made while examining how to deal with one's considered standards and values and comparing one's performances with the others using this judgment. Self-esteem penetrates all thoughts, perceptions, excitements, dreams, values and goals of an individual (2). Self-esteem is defined as how people think about themselves and how they feel about themselves in their social and academic spheres and how close and synchronized their own ideal self and actual self (1). Coopersmith considers four factors in measuring self-esteem: a) the value that the individual receives from the others; b) experience accompanied with success, in a situation that one sees them self in balance with the environment; c) one's definition of success and failure; d) one's attitude toward criticism (3).

An important concern of educational planners in ed-

ucation departments of universities is academic achievement and preventing the drop in academic performance among students (4).

Students with high self-esteem are more successful in completing assignments and in academic achievement and more resistant to life's issues and problems, and are therefore more likely to be successful (5, 6). However, some studies have questioned the existence of a direct relationship between self-esteem and academic achievement and believe that medium or high self-esteem is not significant and important in academic performance, but low self-esteem has a deterring effect on student's perseverance (7).

2. Objectives

This paradox was the incentive for the present study that had the objective of examining the status of self-esteem and its relationship with academic achievement among students of Kermanshah University of Medical Sciences (KUMS) in the west of Iran.

3. Methods

This was a cross-sectional study carried out on 300 college students in KUMS in 2016. For sampling and data collection, first, each faculty in KUMS was considered as a stratum, then based on proportional-to-size among students in each faculty (medical, dentist, pharmacy, health and nutrition, paramedical, midwifery and nursing) participants were randomly selected. Next, volunteers were given the self-reporting questionnaire. Studying in the academic year 2016 - 2017 at KUMS was the inclusion criterion, and unwillingness to cooperate with the research team and incomplete completion of questionnaires were the exclusion criteria.

The questionnaire included three sections that had 18 items in total: 7 questions for demographic characteristics: age (years), gender (male, female), faculty (medical, dentistry, pharmacy, health and nutrition, paramedical, midwifery and nursing), education level (BSc, MD), parents' education level (under diploma, diploma, academic), and residence in hostel (yes, no); 1 question for academic achievement (self-reported total Grade Point Average - GPA); and 10 items of the Rosenberg self-esteem scale (8).

Self-esteem was evaluated by the 10-item standard Rosenberg self-esteem scale. Each item was measured on an ordinal 4-point Likert-type scaling (1 = strongly disagree, 2 =, 3 =, 4 = strongly agree). The items on the scale are: 1) On the whole, I am satisfied with myself, 2) At times I think I am no good at all, 3) I feel that I have a number of good qualities, 4) I am able to do things as well as most other people, 5) I feel I do not have much to be proud of, 6) I certainly feel useless at times, 7) I feel that I'm a person of worth, at least on an equal plane with others, 8) I wish I could have more respect for myself, 9) All in all, I am inclined to feel that I am a failure, 10) I take a positive attitude toward myself. Items 2, 5, 6, 8, 9 are reverse scored. However, it uses a score scale of 10 - 40 and generally higher scores indicate higher self-esteem (8). The reliability coefficient for the social support scale in our study was 0.76, suggesting that internal consistency was adequate.

Data were analyzed by SPSS version 20 using t-test, one-way ANOVA and Pearson correlation statistical tests at 95% significant level.

4. Results

The mean age of respondents was 23.1 ± 2.8 years, ranging from 18 to 38 years; 38.3% (115) of participants were male and 61.7% (185) female; 52.7% (158) of participants reported living in the dormitory; 37.3% (112) were MD students and 62.7% (188) BSc students. Nearly 10% (30), 47.3% (142) and 42.7% (128) of the respondents reported that their father

had diploma, diploma, and academic education, respectively. In addition, 14.3% (43), 58.3% (175), and 27.4% (82) of the respondents reported that their mothers had diploma, diploma, and academic education, respectively (Table 1).

The results showed MD students had more self-esteem compared with BSc students ($P < 0.017$). There was a significant relationship between mother's education level and self-esteem ($P < 0.001$).

The mean self-esteem score of respondents was 29.82 ± 3.83 , ranging from 16 to 37. This finding showed that participants required 74.5% of the maximum achievable score for self-esteem.

Finally, Pearson correlation was computed to ascertain the magnitude and direction of the associations between GPA and self-esteem. The results showed self-esteem was significantly correlated with academic achievement ($r = 0.292$).

5. Discussion

The aim of this study was to determine status of self-esteem and its relationship with academic achievement among KUMS students. The results showed that self-esteem had a significant relationship with academic achievement among college students.

Our findings showed participants required 74.5% of the maximum achievable score for self-esteem. Janati carried out research on nursing and midwifery students in Mazandaran University of Medical Sciences, in central-northern Iran, and reported that 91% of the students had high self-esteem (9). These studies showed the importance of self-esteem in improving academic achievement.

Our study findings indicated self-esteem was significantly correlated with the GPA. Several studies have reported significant relationship between self-esteem and students' academic achievement (5, 6). For example, Hosseini et al. reported that self-esteem is a powerful predictor for students' academic achievement (5). Our result is similar to the results reported by other studies. However, Tamannaifar et al. carried out research on 400 male and female students in the University of Kashan in central Iran and reported no correlation between self-esteem and academic achievement among college students (6). Findings of the present study confirm the important role of self-esteem in students' academic achievement.

The findings of our study showed that mother's education level was the more influential predictor on GPA, suggesting rising GPA with increasing level of mother's education. Several studies have shown that mother's education level can predict general health and achievement among children (10). This result could be consistent with the do-

Table 1. Association Between Background Variables with Academic Achievement and Self-Esteem

Variables	No.	Academic Achievement		Self-Esteem	
		Mean (SD)	P Value	Mean (SD)	P Value
Age group, y^a					
18 - 20	62	15.99 (1.36)	0.413	29.24 (3.19)	0.144
21 - 25	191	16.12 (1.25)		30.14 (3.37)	
26 - 30	42	16.11 (1.23)		30.64 (3.52)	
31 - 38	5	15.18 (1.78)		29.00 (4.18)	
Sex^b					
Male	115	15.90 (1.38)	0.058	30.11 (3.61)	0.679
Female	185	16.21 (1.23)		29.94 (3.24)	
Education level^b					
BS.c	188	15.93 (1.43)	0.017	29.68 (3.30)	0.032
MD	112	16.29 (0.97)		30.55 (3.46)	
Father education level^a					
Under diploma	30	15.77 (1.28)	0.209	28.80 (3.30)	0.017
Diploma	142	16.04 (1.34)		29.76 (3.39)	
Academic	128	16.22 (1.18)		30.57 (3.31)	
Mother education level^a					
Under diploma	43	15.14 (0.98)	< 0.001	28.11 (4.11)	< 0.001
Diploma	175	16.09 (1.24)		29.98 (3.00)	
Academic	82	16.62 (1.17)		31.04 (3.34)	
Living in dormitory^b					
Yes	158	15.97 (1.27)	0.134	29.55 (3.37)	0.013
No	142	16.21 (1.26)		30.52 (3.24)	
Total	300	16.08 (1.27)	-	29.82 (3.83)	-

^a One-way ANOVA.^b t-test.

mestic division of labor, where the mother is mainly responsible for taking care of children.

The present study has several strengths such as using a standard questionnaire that contains few questions, which increases the probability of cooperation among participants. The findings reported in this study had several limitations. First, data collection was based on self-reporting, which is usually prone to recall bias. Second, the small sample size is another limitation of this study. Third, the present study evaluated academic achievement using one self-reporting questionnaire of total GPA, and this asks for more attention in interpreting the results.

6. Conclusion

Based on our findings it is apparent that planning psychological interventions to increase the level of self-esteem

may be useful in promoting academic achievement.

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