# RELATIONSHIP BETWEEN SELF-ESTEEM AND FIELD OF STUDY AND ITS EFFECT ON ACADEMIC BURNOUT IN STUDENTS OF SHIRAZ UNIVERSITY OF MEDICAL SCIENCES

**Fatemeh Mahmoudi [a], Abdolreza Mahmoudi [b], Hadi Raeisi Shahraki [c*], Maryam Shamsaei [b], Hashem Kakaei [b]**

[a] *Department of Psychology, Faculty of Education & Psychology, Alzahra University, Tehran, IRAN*
[b] *Islamic Education Department, Faculty of Medicine, Shiraz University of Medical Sciences, Shiraz, IRAN*
[c] *Department of Biostatistics and Epidemiology, Faculty of Health, Shahrekord University of Medical Sciences, Shahrekord, IRAN*

| A R T I C L E I N F O | A B S T R A C T |
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| | Medical students are prone to burnout due to high volume and stressful courses and also attending medical centers. Therefore, the present study aimed to investigate the relationship between self-esteem and field of study and its effect on academic burnout in students of Shiraz University of Medical Sciences. This cross-sectional study was conducted on 600 students of Shiraz University of Medical Sciences selected by multi-stage cluster sampling in 2018. Data were analyzed by SPSS® software. The mean score of self-esteem in men was higher than that of women and the mean score of burnout in men was lower than that of women, but this difference was not statistically significant. There was no significant difference in the mean of self-esteem among single and married students. Also, the level of academic burnout was significantly lower among married students than single students. There was a significant negative correlation between self-esteem and academic burnout. The results of the regression analysis showed that academic burnout is the only predictor of student self-esteem. The precise and principled planning for medical and paramedical students who are prone to severe academic burnout due to their very difficult educational situation can play an important role in increasing self-esteem in these students.<br><br>© 2019 INT TRANS J ENG MANAG SCI TECH. |

## 1. INTRODUCTION

Young people can circle the social, economic, and political activities of a society, transform the community and bring it to the height of glory and success, or to decay and annihilate. At the same time, students are very important as young human resources in

preparation for providing services and management in the future of the country [1]. Meanwhile, during the period of study, all students, especially students of the medical sciences department who, in addition to having the same problems of other students in other fields, encounter various problems and difficulties of their specialty, including psychological stresses in the hospital environment, emergency and also dealing with patients, which is why they are at greater risks of losing mental health than other students [2]. Therefore, identifying and, if necessary, intervening in many factors affecting the mental health of students, especially students in the medical and paramedical department, is very important.

Individual characteristics of students are one of the important factors influencing their professional development. One of the most important characteristics of a normal personality is self-esteem (3). Moreover, self-esteem is said to be one of the most important factors affecting mental health and coping ability of students in confronting multiple life difficulties, including problems related to their education period [4]. Self-esteem is an aspect of self-concept and the most definite factor in the mental development of individuals and it means the judgments that a person has about his values. In fact, one can say the degree and value that a person attributes to himself [2]. In other words, self-esteem affects all thoughts, perceptions, excitements, aspirations, values, and goals of the individual and is the key to his behavior [5]. The dimensions of self-esteem include the social dimension (the emotion that people have about themselves as friends to others), the educational dimension (matching themselves to the desired educational criteria), the family dimension (the individuals' feelings about themselves as members of families) and then public self-esteem (a more general assessment of self that deals with its assessment in all areas) (4). At the same time, it seems that in an academic context, low self-esteem and fear of failure in individuals may cause them to lose the position that may provide an individual's educational growth and prosperity despite the challenges.

Several studies have shown that individuals with high self-esteem, in contrast to those with a low one, are more likely to resist against life problems, and thus have a higher probability of success [6]. However, students' self-esteem seems to be related to a number of factors such as the field of study [7]. For example, Asgari et al. [2] in a study investigating the dimensions of self-esteem among students of Guilan University of Medical Sciences, reported the relationship between self-esteem and field of study as one of their research findings and showed that the mean scores of self-esteem have a significant relationship with the student's field of study. However, in the literature review of studies conducted in Iran, few studies have investigated the relationship between self-esteem and field of study in medical students. Therefore, one of the aims of this research is to investigate the relationship between self-esteem and field of study in medical students.

Also, academic burnout as one of the common problems of students, especially in the medical group due to the difficulty and stressfulness of the courses and their various activities are worthy of attention. Academic burnout is a condition of emotional exhaustion, pessimism about assignments, lack of competence and efficiency. Students experience

negative emotional excitement against chronic stresses due to the lack of resources necessary to perform their duties and assignments [8]. In fact, students who are suffering from burnout are feeling exhausted because of the large volume of assignments. Also, another feature of people involved with academic burnout is that they are pessimistic about assignments and are not eager to improve their academic performance. Therefore they suffer from a sense of competence and low self-efficacy, which may be the problem generalized to other areas of their lives [9]. For example, a student who is not successful in the field of education does not receive positive feedback from family members and close friends and may face other negative consequences such as reduced self-esteem and problems in interpersonal communication. Academic burnout can occur because of various reasons. Knowing these factors plays an important role in controlling it [8]. Based on the results of the studies, academic burnout has an adverse effect on the academic performance of students and their psychological problems. For example, there is a positive and significant relationship between academic burnout and fragile self-esteem and mental health disorder [10].

According to the above-mentioned, it seems that academic burnout affects students' self-esteem. It is also clear that paying attention to psychological factors which may be problematic in this group of people and trying to solve their problems is of particular importance. Therefore, the present study aimed to investigate the relationship between self-esteem and field of study and its effect on academic burnout in students of Shiraz University of Medical Sciences.

## 2. METHODOLOGY

This study was descriptive/cross-sectional. The statistical population of this study was Shiraz University of Medical Sciences students who were selected by multi-stage cluster sampling. At first, four departments were selected and then five majors were selected from each department. Sample selection criteria included students of Shiraz University of Medical Sciences, undergraduate education, informed consent and willingness to participate in the study, willingness to cooperate in completing instruments and age range from 18 to 30 years. The following questionnaires were used to collect information:

**Maslach Burnout Inventory (MBI)**: This inventory, which consists of 15 questions, is prepared by Schaufeli et al. The questionnaire was scored based on the Likert scale of five-options (totally agree = 5, agree = 4, disregard = 3, disagree = 2 and totally disagree = 1). The validity of the questionnaire has been confirmed by its makers using factor analysis method and its dimensions' reliability has been reported 0.70, 0.82 and 0.75 respectively by Breso et al. [12]. Sheikholeslami et al. [11] also obtained the reliability of the total score of the questionnaire using Cronbach's alpha (0.81). Also, Shabani's research results, et al. [13], showed that the structural analysis of the confirmatory factor, both the three-factor model based on the findings of the main components analysis and based on the main constructive findings, is more fitted to the data than the one-factor model. The results of the

internal consistency of the whole scale and its factors indicated the acceptable reliability of this scale.   The correlation between each scale item and the total score varied from 0.33 to 0.75 and was significant.

**Rosenberg Self-Esteem Standardized Questionnaire**: The Rosenberg Self-Esteem Scale (1965) was used to measure self-esteem in this research. This scale consists of 10 general terms that measure the degree of life satisfaction and a good feeling about you (Sally and Silverstone, 2003) and based on a four-degree Likert scale [21].   Validity and reliability of this scale have been shown in several studies (Rajabi and Bohloul, 2007, Alizadeh et al., 2005), which was examined by internal consistency and Cronbach's alpha was 85%.

## 3.  STATISTICAL METHOD

Descriptive statistics were reported as mean± SD and frequency (%) for categorical and continuous variables respectively. Inferential statistics also performed via Pearson correlation, independent t-test and finally variables with $p < 0.30$ were entered in multiple linear regression.   All the P-values less than 0.05 were considered as statistically significant in SPSS®20 software.

## 4.  RESULTS

Out of 600 students, 398 (66.3%) were female, 202 (33.7%) were male and the mean age of participants was $21.5 \pm 4.3$.   Only 73 (12.2%) students were married, nearly half of them (50.2%) at time of the study lived with their own family and almost two-thirds of them (64.8%) had a personal laptop. Moreover as shown in (Table 1), most of the students claimed that they have no source of income.

**Table 1.** Socio-demographic Characteristics of 600 undergraduate students at Shiraz University of Medical Sciences

| Characteristic | Subgroup | Frequency (%) | Characteristic | Subgroup | Frequency (%) |
|---|---|---|---|---|---|
| Gender | Male | 202 (33.7) | Father education | ≤6 years | 20 (3.3) |
| | Female | 398 (66.3) | | 7-12 years | 228 (38.0) |
| Age | ≤ 20 | 323 (53.8) | | > 12 years | 352 (58.7) |
| | >20 | 277 (46.2) | Mother education | ≤6 years | 17 (2.8) |
| Marital status | Single | 527 (87.8) | | 7-12 years | 314 (52.3) |
| | Married | 73 (12.2) | | > 12 years | 269 (44.8) |
| Residence | With family | 301 (50.2) | Individual's position among the children of the family | First | 249 (41.5) |
| | Dormitory | 271 (45.2) | | Second | 189 (31.5) |
| | Other | 28 (4.7) | | Third | 84 (14.0) |
| Ethnicity | Fars | 453 (75.5) | | Forth and higher | 78 (13.0) |
| | Lor | 80 (13.3) | Monthly Self-income | Nothing | 468 (78) |
| | Other | 66 (11.2) | | < 100 $ | 57 (9.5) |
| Major | Medical(medical, dental and pharmaceutical) | 309 (51.5) | | 100-200 $ | 30 (5.0) |
| | Para- medical | 291 (48.5) | | > 200 $ | 45 (7.5) |
| Private car | No | 459 (76.5) | Monthly family income | < 300 $ | 140 (23.3) |
| | Yes | 141 (23.5) | | 300-600 $ | 238 (39.7) |
| Private laptop | No | 211 (35.2) | | 600-900 $ | 110 (18.3) |
| | Yes | 389 (64.8) | | > 900 $ | 112 (18.7) |

Mean ± SD of burnout score was $38.1 \pm 15.2$(median= 39.0, ranged from 0 to 90) and Mean ± SD of self-esteem was $5.42 \pm 4.97$ (median=8.0, ranged from -10 to 10) among students. A significant correlation observed between self-esteem and burnout (r=-0.47,

F.Mahmoudi, A.Mahmoudi, H.R.Shahraki, M.Shamsaei, H.Kakaei

P<0.001) as students with a higher score of self-esteem had a lower score of burnout and vice versa.

Our results showed that males earned a slightly higher score of self-esteem and slightly lower burnout score than females but none of this differences were not statistically significant (P=0.86 and P=0.75 respectively). Mean score of self-esteem among married and single students were 6.41± 3.68 and 5.28± 5.11 respectively but the observed difference was not statistically significant (P=0.07). Married students also had significantly lower scores of burnout than single ones (33.5± 13.9 versus 38.8± 15.3, P=0.005). In Table 2, no significant difference was detected in the subgroup of demographic and socio-economic factors in term of self-esteem and burnout score.

**Table 2.** Comparison of the mean score of burnout and self-esteem among a subgroup of socio-demographic variables

| Characteristic | Subgroup | Burnout score | P-value | Self-esteem | P-value |
|---|---|---|---|---|---|
| Gender | Male | 37.9± 15.3 | 0.75 | 5.47± 5.19 | 0.86 |
| | Female | 38.3± 15.2 | | 5.39± 4.86 | |
| Age | ≤ 20 | 39.1± 14.9 | 0.08 | 5.40± 5.09 | 0.93 |
| | >20 | 37.0± 15.6 | | 5.44± 4.83 | |
| Marital status | Single | 38.8± 15.3 | 0.005 | 5.28± 5.11 | 0.07 |
| | Married | 33.5± 13.9 | | 6.41± 3.68 | |
| Residence | With family | 37.5± 16.0 | 0.54 | 5.35± 5.22 | 0.43 |
| | Dormitory | 38.9± 13.6 | | 5.60± 4.58 | |
| | Other | 38.2± 20.6 | | 4.36± 5.79 | |
| Ethnicity | Fars | 38.1± 15.4 | 0.77 | 5.55± 4.94 | 0.49 |
| | Lor | 37.4± 15.2 | | 4.95± 5.05 | |
| | Other | 39.2± 14.6 | | 5.04± 5.06 | |
| Major | Medical(medical, dental and pharmaceutical) | 39.2± 14.9 | 0.07 | 5.54± 5.00 | 0.68 |
| | Para-medical | 37.0± 15.5 | | 5.09± 4.08 | |
| Private car | No | 38.7± 15.0 | 0.08 | 5.24± 5.08 | 0.12 |
| | Yes | 36.2± 15.7 | | 5.99± 4.55 | |
| Private laptop | No | 38.5± 15.2 | 0.69 | 5.13± 4.95 | 0.30 |
| | Yes | 38.0± 15.3 | | 5.57± 4.98 | |
| Father education | ≤6 years | 39.0± 22.7 | 0.42 | 5.40± 5.24 | 0.99 |
| | 7-12 years | 37.1± 14.1 | | 5.41± 5.04 | |
| | > 12 years | 38.8± 15.4 | | 5.42± 4.93 | |
| Mother education | ≤6 years | 39.7± 20.6 | 0.89 | 5.06± 5.20 | 0.37 |
| | 7-12 years | 38.2± 15.0 | | 5.17± 5.11 | |
| | > 12 years | 37.9± 15.1 | | 5.73± 4.79 | |
| Individual's position among the children of the family | First | 37.2± 15.0 | 0.06 | 5.50± 5.13 | 0.34 |
| | Second | 40.3± 14.7 | | 5.24± 4.62 | |
| | Third | 38.5± 15.3 | | 6.14± 4.84 | |
| | Forth and higher | 35.5± 16.5 | | 4.79± 5.37 | |
| Monthly Self-income | Nothing | 38.7± 15.0 | 0.06 | 5.41± 5.00 | 0.23 |
| | < 100 $ | 39.2± 15.7 | | 4.42± 5.23 | |
| | 100-200 $ | 34.0± 16.3 | | 5.87± 5.41 | |
| | > 200 $ | 33.4± 15.7 | | 6.40± 3.76 | |
| Monthly family income | < 300 $ | 37.8± 15.8 | 0.16 | 5.37± 5.10 | 0.56 |
| | 300-600 $ | 38.1± 13.5 | | 5.28± 4.70 | |
| | 600-900 $ | 36.1± 16.2 | | 6.02± 5.15 | |
| | > 900 $ | 40.7± 16.6 | | 5.18± 5.21 | |

Results of regression analysis revealed that burnout is the only effective factor in self-

esteem as each unit increase on burnout score leads to 0.15 decrease on self-esteem score (Table 3).

**Table 3.** Results of linear regression analysis for self-esteem modeling

| Characteristic | Subgroup | Coefficient | SE | p-value |
|---|---|---|---|---|
| Marital status | Single | --- | --- | 0.49 |
| | Married | 0.44 | 0.64 | |
| Private car | No | --- | --- | 0.49 |
| | Yes | -0.32 | 0.46 | |
| Private laptop | No | --- | --- | 0.29 |
| | Yes | -0.40 | 0.39 | |
| Monthly Self-income | Nothing | --- | --- | --- |
| | < 100 $ | -1.00 | 0.62 | 0.11 |
| | 100-200 $ | -0.53 | 0.87 | 0.54 |
| | > 200 $ | -0.18 | 0.80 | 0.82 |
| Burnout | | -0.15 | 0.01 | <0.001 |

## 5. CONCLUSION

Regarding the purpose of this study in order to investigate the relationship between self-esteem and field of study and its effect on academic burnout in students of Shiraz University of Medical Sciences, findings from the statistical analysis showed that self-esteem between two groups of medical and paramedical students has no significant differences. This finding was consistent to Zare's study in Shiraz University of Medical Sciences, which showed that there is no significant difference between the mean scores of self-esteem in various fields (medicine, dentistry, pharmacy, nursing rehabilitation, midwifery and rehabilitation, paramedical, management and health) [16]. Also, this finding is consistent to Hassanzadeh's study on second-grade students in mathematics-physics and experimental sciences in Amol NODET high school which showed there were no significant differences between students' self-esteem and field of study [17].

Therefore, it can be stated that considering the self-esteem of individuals can be influenced by how people interact with each other, this finding can indicate that professors, faculty, and staff of the education and training department of Shiraz University of Medical Sciences towards students of different disciplines. On the other hand, in explaining this finding it can be stated that students' self-esteem (as the core of individual psychological structures in coping with stresses such as psychological, personal, social, educational, etc.), different medical and non-medical disciplines of Shiraz University of Medical Sciences has not created different coping skills, and students of all disciplines have a decent level of self-esteem.

Also, this study findings of statistical analysis showed that there is a negative correlation between self-esteem and academic burnout among students of Shiraz University of Medical Sciences. As with increased self-esteem, academic burnout decreases and vice versa. The results of the regression analysis showed that academic burnout is the only predictor of students' self-esteem. This finding is consistent with the study by Rahimnia et al. [18] which showed that there was a significant negative correlation between job burnout and self-esteem in nurses. This finding is consistent with studies by Jabri et al. [19] and Fors et al. [20].

Rahimnia and colleagues stated in the same explanation that high self-esteem reduces

stress and interpersonal problems, reducing job burnout. In other words, in general, a person with high self-esteem is expected to be less stressed and its consequences. While people with low self-esteem are prone to burnout, they have few resources to deal with stressors that lead to burnout. In addition, they are always seeking approval from the others, and this is particularly problematic in those environments that have an emotional load, such as a hospital or at times when people are away from their family and emotional resources, such as the university's atmosphere [21, 22].

Also, it can be stated in explaining this finding that those who have low self-esteem are more affected by environmental conditions than their peers with high self-esteem despite the general flexibility of attitude and behavior. Such people, in stressful situations, show more anxiety, depression and neuroticism, and less of effectiveness, self-efficacy, initiative, and merit. Therefore, they are more exposed to prolonged periods of burnout, and so self-esteem can affect burnout.

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**Fatemeh Mahmoudi** is a PhD student of the Department of Psychology, Faculty of Education & Psychology, Alzahra University, Tehran, Iran

**Dr. Abdolreza Mahmoudi** is an Assistant professor of Islamic Education Department, Faculty of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.

**Dr. Hadi Raeisi Shahraki** is an Assistant Professor in Department of Biostatistics and Epidemiology, Faculty of Health, Shahrekord University of Medical Sciences, Shahrekord, Iran.   He obtained his PhD from the Department of Biostatistics, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.

**Dr. Maryam Shamsaei** is an Assistant Professor of Islamic Education Department, Faculty of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.

**Dr. Hashem Kakaei** is an Instructor of Islamic Education Department, Faculty of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.