

Association between Differentiation and Self-Esteem in Jahrom University of Medical Sciences Students

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Abstract

Aims: Differentiation is a self-differentiation that means balancing emotional and intellectual issues. Differentiation has affected personality dimensions in different dimensions, considering that self-esteem is the most definite factor in a person's psychological development and one of the most important factors affecting students' academic success. This study aimed to determine the relationship between differentiation and self-esteem in Jahrom University of Medical Sciences students in 2021.

Instrument & Methods: This cross-sectional study was performed by available sampling with the participation of 170 medical, nursing, operating room, anesthesia, public health, and laboratory students of Jahrom University of Medical Sciences in 2021-2022. Data collection tools were the Skorn and Friedlander differentiation and Eysenck's self-esteem questionnaires. Data were analyzed using SPSS 21 software by Spearman correlation test.

Findings: The mean of differentiation was 181.97 ± 37.94 . A moderate level of differentiation was observed in 131 subjects (77.1%). A low level of differentiation was observed in 31 subjects (18.2%), and eight subjects (4.7%) showed a high level of differentiation. The mean of the self-esteem was 18.34 ± 5.73 . 157 students (92.4%) had a high level, and 13 subjects (7.6%) had a moderate level of self-esteem. There was a positive significant correlation between the differentiation and self-esteem of the subjects ($p=0.001$; $r=0.398$).

Conclusion: Differentiation and self-esteem have a positive significant relationship among Jahrom University of Medical Sciences students.

Keywords

Differentiation [Not in MeSH];

Self-Esteem [Not in MeSH];

Students [<https://www.ncbi.nlm.nih.gov/mesh/68013334>]

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Introduction

Differentiation is self-separation, which means balancing emotional and rational issues, intimacy, and individual independence. Differentiated people do not need to adapt to others and imitate other people [1-2]. In this regard, Bowen's theory is one of the theories of differentiation which presented many definitions for differentiation. One of its main definitions is a person's ability to separate reason and emotion and control emotions and feelings concerning following the family. Differentiation has two parts: Emotional maturity, or the individual dimension that is related to the individual and refers to the distinction between emotions and logic, and relational maturity, or extrapersonal dimension, which is related to a person's relationship with others and the continuity of this relationship while maintaining independence and autonomy [3-4]. According to the definitions, differentiation has four components [5]:

- 1) Emotional reactivity: In this case, the person's feelings are more than her/his reason and logic, and decision-making is often based on the person's feelings;
- 2) I-position: in this component, a differentiated person has her/his specific characteristics and desires and does not seek to follow and imitate others;
- 3) Emotional cutoff: The physical distance of children from their parents and other family members by creating psychological barriers, which means that the person seeks to find a way to escape from the emotional bonds of the family; and
- 4) Fusion with others: In this system, people are influenced by others, so a person needs the support and encouragement of other people, and all of the person's actions are influenced by the emotional reactions of the people around her/him.

The influence of differentiation can be seen in relationships, especially in students who have entered a new phase of life, because they are more in touch with the surrounding environment and need to establish more intimate relationships with others. In the system developed by Bowen, all symptoms of mental illnesses, physical illnesses, social problems, sexual problems, and drug addiction are affected by the differentiation level of people. Differentiation has a significant role in students' academic problems [6]. In the research background of differentiation and mental health of students, it has been shown that people with a high level of differentiation have a clear definition of their life and their opinions and thoughts, and they can have more independence in their affairs. Whereas distrust, psychological disorders, disruption of academic performance, depression, and anxiety during exam time occur due to the low level of differentiation [7]. Self-esteem is how people value and perceive themselves. Since many antisocial behaviors and abnormalities

originate from low self-esteem, it must be considered [8]. During their studies, medical science students faced more problems specific to their field, such as the mental-psychological pressure of the hospital environment, the emergency room, and dealing with patients' problems. So, there is more risk of mental disorders in students educated in the medical sciences [9]. Self-esteem is a psychological factor that affects health and quality of life [10]. Self-esteem is so significant in teenagers and young people, especially students. Meanwhile, people who have high self-esteem are more successful in other affairs. They are more involved in student societies, show higher social compatibility, and have more resistance in dealing with problems [11]. According to Azizi *et al.*, most medical students have low self-esteem [9]. Therefore, the self-esteem level and related factors in medical science students can be one of the necessities and research priorities.

Students educated in medical and clinical sciences should be able to control their feelings and make the best decisions for patients and those not in good mental and physical condition. So, they need more differentiation level and self-esteem to perform therapeutic procedures, reduce the possibility of therapeutic errors, and increase quick and timely decision-making. Also, the differentiation of a person can affect her/his self-esteem. Therefore, this study aimed to investigate the association between differentiation and self-esteem.

Instrument and Methods

This analytical-cross section study was conducted in the Jahrom University of Medical Sciences students (medical, nursing, operating room, anesthesiology, public health, and laboratory science) in 2021-2022. The sample size was determined to be 170 students based on the study by Barkhordari *et al.* [12]. Psychological problems such as depression, anxiety, schizophrenia, etc., physical diseases, and taking antipsychotic and depression drugs lead to exclusion. Data were collected using the three questionnaires; demographic information (age, gender, field of study, admission date, academic semester, grade point average, parents' educational qualification, and parents' occupation), Skorn & Friedlander's differentiation, and Eysenck's self-esteem.

Skorn & Friedlander's differentiation questionnaire [13] was developed by Skorn and Friedlander in 1988 and revised by Skorn in 2003. The questionnaire included 46 items scored by a range from 1 (It doesn't matter to me at all) to 6 (It is completely true about me). All the items were scored in reverse mode except questions 4-7-11-15-19-23-27-31-37-43. The questionnaire includes four dimensions; emotional reactivity, I-position, emotional cutoff, and fusion with others. The maximum score on this test is 276. The score ranges of 46-122, 123-199, and 200-276 show low, medium, and high levels of differentiation.

Cronbach's alpha calculated by Skorn and Friedlander was 0.88 for overall differentiation and 0.63, 0.75, 0.60, and 0.70 for the mentioned dimensions, respectively. The differentiation questionnaire has been standardized by Yousefi *et al.* in Iran. The questionnaire reliability by Cronbach alpha coefficient was calculated by 0.87, 0.88, 0.87, 0.86, and 0.72 for the dimensions of emotional reactivity, I-position, emotional cutoff, and fusion with others, respectively, and it was calculated by 0.72 for the questionnaire [14].

In Eysenck's self-esteem questionnaire, the respondent has two options of "yes" and "no", and if it is not possible to answer, the respondent chooses the option of "middle" and puts a question mark (?). Answers that measure self-esteem versus feelings of inferiority are given 1 point, while the opposite answers are not given any points. Answers that measure self-esteem versus feelings of inferiority are scored 1, while the opposite answers are not given any points. The options that include the "question mark" are given half a score; thus, the highest score on this test is 30. The answer of "yes" has one mark on questions 1-2-5-9-10-11-16-22-23-29-30. The answer of "no" has a score of 1 in the items of 3-4-6-7-8-12-13-14-15-17-18-19-20-21-24-25-26-27-28. The range scores of 0-5, 6-10, 11-15, 16-20, 21-25, and 26-30 show very low level, low level, medium level with a tendency to low, medium level with a tendency to a high level, high level, and very high level of self-esteem, respectively. Hormozinejad, in research on Shahid Chamran students of Ahvaz, reported the construct validity of this test as 0.74 and 0.79 for female and male students, respectively. Also, he administered the Eysenck Self-Esteem Test and Ahvaz Self-Esteem Scale to male and female students of the Shahid Chamran University of Ahvaz. The validity coefficient of the scale was calculated by $r=0.79$ and $r=0.74$ for the female and male subjects, respectively ($p>0.001$). Hormozinejad mentioned the desirable psychometry of the questionnaire [15].

The subjects obtained verbal and written informed consent to participate in the study. The aims of the study were explained to the subjects. The subjects were assured about voluntary participation and the principle of anonymity and confidentiality for participating in the study.

Data were analyzed using SPSS 21 software. The Spearman's correlation coefficient was used at the significance level of 0.05.

Findings

The mean age of the subjects was 21.03 ± 1.55 years, and 63.5% were female. Medical, nursing, anesthesiology, operating room, public health, and laboratory science students were 12.9, 12.9, 21.8, 17.1, 15.9, and 18.8%, respectively.

The mean of differentiation was 181.97 ± 37.94 . A moderate level of differentiation was observed in 131

subjects (77.1%). A low level of differentiation was observed in 31 subjects (18.2%), and eight subjects (4.7%) showed a high level of differentiation.

The mean of the self-esteem was 18.34 ± 5.73 . 157 students (92.4%) had a high level, and 13 subjects (7.6%) had a moderate level of self-esteem.

There was a positive significant correlation between the differentiation and self-esteem of the subjects ($p=0.001$; $r=0.398$).

Discussion

There was a significant relationship between the differentiation and self-esteem of the subjects, so as students' differentiation increases, students' self-esteem also increases. The results of this study showed that the differentiation level can be promoted by providing coherent planning during different education levels, so the self-esteem of the medical sciences students will be improved, especially during clinical practice. Differentiation balances emotional and rational autonomy, intimacy, and connectedness in relationships. People with high differentiation level has a specific definition of themselves and their opinions; they can choose their direction in life and control their feelings when facing emotional situations that may lead to involuntary behavior and unsuccessful decisions. Also, they do decision-making considering logic and reason.

Therefore, according to this definition, improving differentiation is necessary, especially for medical sciences students, who need to make essential decisions in different clinical situations. Developing non-cognitive skills, such as self-esteem, is a critical dimension of education. Self-esteem is among the influential psychological variables on the quality of students' performance. Self-esteem as a stress modifier in clinically stressful situations may improve the students' emotional self-worth and help them to make better scientific decisions. Several studies have been conducted in this field [16-19]. For example, Kavila *et al.* concluded that people with more levels of differentiation endure less stress in the work environment and are more satisfied with their jobs, so improving differentiation can positively affect self-esteem. Murdock and Georgia R showed a negative relationship between differentiation and psychological distress in students, so the differentiation moderates the effects of perceived stress in predicting psychological performance [20].

Scowron *et al.* mentioned that differentiation is negatively associated with psychological symptoms. Since self-esteem is the central core of a person's psychological structures in dealing with stress, such as psychological, personal, and social pressures, differentiation can effectively modulate a person's psychological performance [21]. The results of another study examining the correlation between differentiation and happiness showed a positive significant relationship between differentiation and

happiness. Hence, promoting differentiation leads to students' happiness [22].

This study was limited to the perspective of medical, nursing, operating room, anesthesiology, public health, and laboratory science Jahrom University of Medical Sciences students, and caution should be exercised in generalizing the results to other societies. One of the strength points of this study was that the sample size was sufficient, and the sampling was carried out in all students educated in the medical science department. Moreover, this is the only study to examine the relationship between self-esteem and differentiation.

Conclusion

Differentiation and self-esteem have a positive significant relationship among Jahrom University of Medical Sciences students.

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Ethical Permission: This research was confirmed by the ethics committee of Jahrom University of Medical Sciences (Ethics Code: IR.JUMS.REC.1398.067).

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