



The Relationship Between Critical Thinking Disposition and Self-Esteem in Midwifery Students

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Abstract

Background: Students' personal characteristics are among the factors influencing the development of their critical thinking. Self-esteem is a normal influencing personality trait. Self-esteem affects all the aspects of individuals' lives including the way of their thinking and performance.

Objectives: Therefore, the current study aimed to determine the relationship between critical thinking disposition and self-esteem in the midwifery students of Mashhad University of Medical Sciences in 2014.

Methods: This cross sectional study was carried out on all bachelor students (N = 53) of the Mashhad Nursing and Midwifery Faculty. Data were collected through a personal information form, the Rosenberg's self-esteem questionnaire, and the California critical thinking disposition questionnaire. The collected data were analyzed in SPSS through descriptive statistical methods and a Pearson correlation coefficient test.

Results: The vast majority of students (62.26%) had an unsteady critical thinking disposition. However, 84.90% of them had a moderate level of self-esteem. Pearson correlation test showed no significant relationship between critical thinking disposition and self-esteem ($P > 0.05$).

Conclusions: According to the study results, the vast majority of the study cases had a moderate level of self-esteem with an unsteady critical thinking disposition. There was no significant relationship between critical thinking disposition and self-esteem in the studied midwifery students.

Keywords: Self Esteem, Critical Thinking, Midwife

1. Background

Midwifery is a functional profession (1) where clinical training constitutes the main part of the undergraduate midwifery training. The aim of clinical training is to teach how to use theoretical issues in clinical situations and provide an opportunity to institutionalize the role of a midwife in midwifery students. Nevertheless, theoretical training is not always manifested in students' performance (2) so that in real clinical situations, they are confused and cannot fulfill the task of the patient care (3). As individuals who enter medical care systems in the near future, midwifery students should have decision-making and problem-solving skills. The skills are under the influence of critical thinking (4, 5).

Critical thinking is a targeted, judgmental, and essential process that is necessary for the growth and evolution of any society and organization. However, it includes

a criterion based on which a judgment is founded. It is composed of two aspects: Skill and disposition. Skill concentrates on cognitive strategies while disposition emphasizes the perceptual components of thinking, as well as inherently sustainable motivations for problem-solving (6, 7). Relying on critical thinking, one should be equipped with this skill against problems. Without a positive disposition toward critical thinking (the emotional aspect), this type of thinking will not be realized (8). The study by Rochester et al. on graduated midwifery students in Sidney showed that the students lacked the necessary capabilities in real work conditions and faced problems (9). The personal characteristics of students are among the essential factors affecting the development of critical thinking (8).

Self-esteem is an influencing normal personal characteristic (10). The extent of self-esteem affects all the aspects of individuals' lives including the way of their think-

ing and performance (11). Barkhordari et al. showed that there was a significant positive relationship between critical thinking disposition and self-esteem (8) while a study by Iranfar et al. showed that there was a significant negative relationship between critical thinking disposition and self-esteem (12). The results of Abasi et al. on medical students showed that there was a direct positive correlation between critical thinking and self-esteem (13). A study on nursing students concluded that the tendency to critical thinking was low and a positive relationship was observed between the tendency to critical thinking and self-esteem (14).

2. Objectives

While this is an important subject, there are a few studies in this area in Iran. Therefore, this study aimed to determine the extent of the relationship between critical thinking disposition and self-esteem in midwifery students of the nursing and midwifery faculty, Mashhad University of Medical Sciences.

3. Methods

This cross sectional (descriptive-analytical) study was carried out on midwifery students of the nursing and midwifery faculty, Mashhad University of Medical Sciences, in 2014. The census method was used for recruiting the sample. The study cases were all undergraduate midwifery students of semesters 3, 5, and 7 ($N = 53$) in the first half of the academic year 2014 - 2015.

The inclusion criterion was the consent for participation in the study. Transferred or guest students, students with medical diseases, confirmed mental diseases, and background of depression, and experiencing important events including relatives' death, marriage, pregnancy, childbirth, and accidents during the previous three months were excluded from the study.

Data were collected using a personal information form, the Rosenberg self-esteem questionnaire, and the California critical thinking disposition questionnaire. The personal information form included demographic information like age, residence status, and marital status.

The Rosenberg self-esteem questionnaire included 10 general statements consisting of five sentences with positive words and five sentences with negative words. Each question was scored on a four-point scale of completely agree, agree, disagree, and completely disagree. The score of each item ranged from 0 to 3 and the highest attainable total score was 30. The scores over 25, from 15 to 25, and

below 15 indicated a high, moderate, and a low level of self-esteem, respectively (8, 15). The content validity of the questionnaires was confirmed in different studies and its reliability was confirmed using Cronbach's alpha ($\alpha = 0.89$) (8, 15, 16).

The California critical thinking disposition questionnaire included 75 questions. A Likert six-point scale was used to score the questions (completely disagree, disagree to some extent, disagree, agree, agree to some extent, and completely agree). A point between 1 and 6 was allocated to the questions in accordance with the instruction manual of the questionnaire.

The questions were divided into seven subscales of truth-seeking (12 questions), exceptionable (12 questions), analytic power (11 questions), data organization power (11 questions), self-confidence (9 questions), the extent of maturity (10 questions), and exploration (10 questions).

The minimum and maximum scores of the questionnaire were 70 and 420, respectively. A score above 350, between 280 and 350, between 211 and 279, and below 210 indicated strong and sustainable disposition, positive moderate disposition, unsteady disposition, and completely negative disposition, respectively. The content validity of the questionnaires was confirmed through different national and international studies and their reliability was confirmed using the Cronbach's alpha test ($\alpha = 0.75$) (6, 17).

Following the approval of the ethics committee of the university, the study objectives were explained to the participants and the signed written consent forms were collected. The personal information form, Rosenberg's self-esteem questionnaire, and California critical thinking disposition questionnaire were filled out by the cases within 30 minutes (during their free times). The collected data were analyzed by SPSS version 16 using descriptive statistics and Pearson correlation tests. First, the normal distribution of quantitative variables was confirmed using the Kolmogorov-Smirnov test. In all tests, the confidence and significance levels were set at 95% and 0.05, respectively.

4. Results

The mean age of the study cases was 23.41 ($SD = 1.08$) years. They had a mean GPA (grade point average) of 16.31 ($SD = 1.05$). Of the study cases, 63.6% were single and 45.0% were living in a dormitory. According to the results, the vast majority of cases (62.26%) had an unsteady critical thinking disposition. However, 84.90% of them had a moderate level of self-esteem (Table 1).

The mean scores of critical thinking disposition and self-esteem were 260.1 ± 38.18 and 16.54 ± 2.34 , respectively.

Table 1. The Frequency of Critical Thinking Disposition in the Studied Midwifery Students in Terms of Self-Esteem^a

Critical Thinking Disposition	Moderate Self-Esteem	Low Self-Esteem	Total	Fischer Exact Test Result
Positive	12 (22.64)	3 (5.66)	15 (28.30)	Exact $\chi^2 = 0.728$, P = 0.557, df = 2
Unsteady	28 (52.83)	5 (9.43)	33 (62.26)	
Negative	5 (9.43)	0 (0.0)	5 (9.43)	
Total	45 (84.90)	8 (15.09)	53 (100)	

^aValues are expressed as No. (%).

Pearson correlation test showed no significant relationship between critical thinking disposition and self-esteem ($P > 0.05$). There was no significant relationship between personal (age, marital status, and residence status) and educational variables, on the one hand, and critical thinking disposition and self-esteem, on the other hand ($P > 0.05$).

5. Discussion

The results of this study revealed that there was no significant relationship between critical thinking disposition and self-esteem in the midwifery students studied. The vast majority of them had a moderate level of self-esteem with an unsteady critical thinking disposition. In various studies, self-esteem has been mentioned as one of the emotional factors influencing the tendency to critical thinking, but the results of this study indicated there is no meaningful statistical relationship between the tendency to critical thinking and self-esteem (8). The tendency to think critically emphasizes the attitudinal components of internal thinking and motivation for problem-solving. Without a positive tendency toward critical thinking, the emotional dimension of this type of thinking does not occur or stands below the standard level (8). Critical thinking has emotional components and mental habits (18). Self-esteem is just one of the psychological dimensions that may affect critical thinking, and other psychological variables are influenced by various factors (13).

The results of the study of Iranfar et al. on 289 medical students in Kermanshah showed that there was a significant negative relationship between the tendency toward critical thinking and self-esteem and increased self-esteem was associated with decreased tendency toward critical thinking; the results that are not consistent with the results of the current study. Iranfar et al. reported unusual findings in their study that the students' perspective naturally affects their personality. In our country, students are working hard to admit to the university, especially in the field of medicine and certainly, those who are accepted in this field are clever and hard working. Therefore, it is not unexpected that they think they are excellent and have

high self-esteem and eventually when entering the university, they believe that their actions or thoughts are better and faster than those of others are. This attitude is wrong and causes these students to ignore the critical principles of critical thinking that are focused on the ideas and beliefs of others (12). This is while pride varies with self-esteem. Self-esteem is the satisfaction of one's self and having a sense of worthiness. In fact, the level of harmony and proximity is the ideal and the real self in a person (19).

The results of Barkhordary et al. showed that there was a significant positive relationship between the tendency toward critical thinking and self-esteem, which the results of these studies are not consistent with the results of the present study. It is possible that these results indicate that the current curriculum of nursing education does not use modern methods of teaching and education, which will lead to the development of this aspect of critical thinking in the students, as well as effective and better learning (8).

The results of the study by Ip et al. (20) showed that the tendency to critical thinking in most studied students was unstable, and the results of Abasi et al. showed that the tendency to critical thinking in the majority (53.3%) of medical students studied was unstable (13), which is consistent with the results of the present study. The results of Sabouri Kashani et al. on the medical students of Tehran and Mashhad Universities of Medical Sciences showed that critical thinking tendency in students was at the positive and intermediate levels (21).

The results of the study by Shin et al. showed that the tendency to critical thinking in nursing students was positive (22), which may be due to differences in academic discipline, academic level, educational environment, and teaching methods.

Considering that other factors can affect students' critical thinking and self-esteem, it is suggested that further research is conducted in this regard.

5.1. Conclusion

The results of this study revealed that there was no significant relationship between critical thinking disposition and self-esteem in the studied midwifery students. The vast

majority of the studied cases had a moderate level of self-esteem and an unsteady critical thinking disposition. Conducting comprehensive studies for identifying the influential factors in positive critical thinking disposition is recommended in order to find solutions for promoting this way of thinking.

Supplementary Material

Supplementary material(s) is available [here](#) [To read supplementary materials, please refer to the journal website and open PDF/HTML].

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