

EC PSYCHOLOGY AND PSYCHIATRY Research Article

Effects of an Undergraduate Nursing Program on the Self-Esteem, Submissive Behaviors, and Mental Problems: A Descriptive Cohort Study

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Abstract

This study aimed to evaluate the effects of a four-year undergraduate nursing program on the students' self-esteem, submissive behaviors and mental problems. The study was designed as a descriptive cohort study. Participants were 80 first-year students who enrolled the nursing program of a university located in the center of Ankara, the capital of Turkey. Data were obtained using the Students Information Form, Coopersmith Self-Esteem Inventory, Submissive Acts Scale, and General Health Questionnaire-12. The first measurements were applied at the beginning of the first year, during the fall 2010 semester, and the second were applied at the end of the fourth year, during the spring 2014 semester. While students' submissive behaviors decreased significantly during the nursing program, the self-esteem and risk of mental problem ratios did not show significant changes. Negative correlations were observed between self-esteem and mental problem risk, and submissive behaviors; there was a positive correlation between submissive behaviors and mental problem risk. There is a need to review the nursing curriculum and evaluate what affects the students' self-esteem and mental health, and also introduce strategies to reduce the risk of mental problems and to increase self-esteem.

Keywords: Nursing Students; Self-Esteem; Submissive Acts; Mental Problems; Cohort Study

Introduction

High self-esteem, high self-confidence, and mental health are important for high-quality nursing care [1,2]. Self-esteem is an important quality and a personality trait or an attribute that is considered as a specific requirement for healthcare professionals during their encounters with patients/caregivers, healthcare team members, and hospital management [3]. Self-esteem represents the extent to which we believe ourselves to be capable, significant, successful, and worthy [4]. Nurses' achievements and job satisfaction are closely associated with self-esteem [5].

Nurses with low self-esteem encounter significant difficulties in communication with colleagues and patients [2]. The high esteem of the nurse involves the use of the real self, the ability to empathize, ability to cooperate, and healthy interpersonal relationships with patients and colleagues [5]. Low self-esteem is also the base of submissive behaviors [6]. Individuals with submissive attitudes feel less worthy and important, cannot express their ideas freely, and experience difficulty in saying "no." They cannot demonstrate leadership behavior, interact with people easily, have low self-confidence, and they avoid changes and taking responsibility [7]. Nursing students will carry out healthcare and health improvement services for the individual, family, and population, and also patient care services for recovery in the presence of diseases after graduation. These important responsibilities require good mental health. Nurses with good mental health can recognize and manage their feelings, motivate themselves, overcome problems effectively, and establish healthy interpersonal relationships in the work environment [8].

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An evaluation of self-esteem, submissive behaviors, and mental problems in nursing students will help rearrange the undergraduate education program in a way to reduce submissive behavior and mental problems, and increase self-esteem. Thus, it will be possible to train nurses who are capable of establishing effective relationships with the healthcare team members, who value themselves, who have high self-confidence, and who are enterprising and productive [7]. There are currently no studies that evaluate the effects of nursing education program on the students' self-esteem, submissive acts, and mental problems as a whole in the literature. There are studies investigating these parameters separately, or their relations with each other in nursing students at different class levels [6,7,9-11]. Similarly, there are currently no studies investigating these properties in a similar group, at the beginning and in the end of the undergraduate education. This study aimed to evaluate the effects of a four-year undergraduate nursing program on the students' self-esteem, submissive behaviors and mental problems.

Methods

Study Design

The study used descriptive analyses to examine a range of variables of a cohort of students undertaking a nursing program at the beginning of their first-year, and at the end of their fourth-year. The aim of this study was to evaluate the effects of a four-year nursing training program on the students' self-esteem, submissive behaviors, and mental problems.

Setting and samples

The sampling of the study included first-year students of the nursing program at a public university health sciences faculty, in the center of Ankara, the capital of Turkey. The nursing program is a four-year educational program. In the year the study was implemented, there were 84 students in the first class. Eighty-four students participated in the first measurement, and 80 students in the second measurement. Four of the students in the last class had to take some lessons from the previous classes, and thus could not complete the nursing program at the same time as the other students. Therefore, the study sample included 80 students participating both in the first and the second measurements. The participation rate of students is 95.2%.

Measurements and instruments

Data were collected by using the Students Information Form, Submissive Acts Scale, Coopersmith Self-Esteem Inventory, and General Health Questionnaire-12 (GHQ-12). The first measurements were performed at the beginning of the first class of the 2010 - 2011 school year, fall term; the second measurements were applied at the end of the fourth class of 2013 - 2014 school year, spring term.

The Students Information Form included questions related to the following items: age, gender, name of the high school from which the student graduated, family structure, number of siblings, economic status of the family, the place where the student stays, place where the family lives, if they chose this profession willingly, and pleasure from the professional choice. The form was developed by the researcher.

The Submissive Acts Scale (SAS) was developed by Gilbert and Allan [12]. Its reliability and validity studies in Turkey were performed by Savaşır and Şahin [13]. The scale evaluates the submissive social acts related to depression. Each statement in the scale questions to what extent the mentioned act describes the individual well. Statements were evaluated using a five-point Likert item. The scale includes 16 statements, and the lowest and the highest scores that can be obtained are 16 and 80, respectively. High points indicate more submissive behaviors. The scale does not have a cut-off point.

The Coopersmith Self-Esteem Inventory (SEI) was developed by Coopersmith [13]. Its reliability and validity studies in Turkey were performed by Turan and Tufan [14]. SEI is a scaling tool used to determine the attitudes of the person toward him/herself in various fields. It includes 25 statements with responses including 'like me' and 'unlike me'. Each true expression is scored as '4', and each false expression is scored as '4', and each false expression is scored as '4'.

sion as '0'. The highest and lowest scores that can be obtained are 100 and 0, respectively. Scores lower than 50 indicate low levels of self-esteem, and those 50 or higher indicate high levels of self-esteem. Self-esteem levels of the individuals become higher as the score rises.

The General Health Questionnaire-12 (GHQ-12) was developed by Goldberg and Hillier [15]. Its reliability and validity studies in Turkey were performed by Kiliç [16]. It is used in population screening to detect psychiatric cases. GHQ-12 includes statements mostly consisting of signs of anxiety and depression. It includes 12 statements. High scores indicate possible mental problems. Each statement has four options, questioning the signs in the last several weeks. These options are arranged in columns coded as 0, 1, 2, or 3 by the responder. The first two columns are scored as 0, and the last two columns are scored as 1. Four or higher indicate an increased likelihood of psychological distress, whereas 2 and 3 points indicate intermediate risk, and less than 2 points indicate low risk of psychological problem. The highest score in GHQ-12 is 12 points.

Ethical Considerations

This study was conducted after obtaining approval from the Ethics Committee of University Senate. Following the Declaration of Helsinki, a written explanation was provided to the participants regarding the study objectives, methods, protection of anonymity, and voluntary basis of participation. It also explained that the collected data would be used only for this study. The author obtained signed informed consent from each participant.

Statistical Analysis

SPSS for Windows version 15 (SPSS Inc., Chicago, IL, USA) was used to perform the statistical analysis of the data. In the analysis of the sociodemographic data of the participants, frequencies and percentages were used. The paired t-test was used to compare the mean of SAS, SEI, and GHQ-12 first and last scores. Pearson's correlation was used to determine the relationship between changes in the pre-test and post-test scores of SAS, SEI, and GHQ-12. A p value less than 0.05 was considered statistically significant.

Results

The mean age of the participants was 18.3 ± 0.70 (min = 17.00, max = 20). Ninety-three point eight percent of the students were girls, 51.3% graduated from Anatolia/science high schools, and 85% were from a nuclear family. Seventy-three point eight percent of the students had intermediate economic level, 67.4% were from a family with 3 - 4 children, and 46.3% were from a family living in the city. Forty-six point two percent of the students were staying in a dormitory. Seventy-two point five percent expressed that they willingly chose the nursing program, and 81.2% were pleased with their choice of nursing program (Table 1).

Variables	n (%)
Age M = 18.3 Min = 17 Max = 20 SD = 0.70	
Gender	
Female	75 (93.8)
Male	5 (6.2)
Family structure	
Nuclear	68 (85.0)
Extended	7 (8.8)
Living with a mother or father	3 (3.8)
Living with relatives	2 (2.4)
Family economic status	
Low	21 (26.3)
Average	59 (73.8)
Number of siblings	
≤ 2	26 (32.6)
3	28 (35.0)
≥ 4	26 (32.4)
Place where the family lives	
City	37 (46.3)
Town	29 (36.3)
Village	14 (17.5)
Place where the student stays	
At home with family	18 (22.5)
At home with relatives	7 (8.8)
At home with friends	18 (22.5)
At the dormitory	37 (46.2)
Willingly chose the nursing program	
Yes	58 (72.5)
No	22 (27.5)
Pleased with choice of nursing program	
Yes	65 (81.2)
No	15 (18.8)

 Table 1: General characteristics of the students.

The mean SAS score of the first-year students was 35.45 ± 8.40 , and the score of fourth-year students was 31.44 ± 6.78 . The difference between the first- and the fourth-year SAS scores was statistically significant (t = 4.536, p = 0.000). The mean SEI scores of the first- and the fourth-year students were 76.46 ± 12.52 and 79.76 ± 14.75 , respectively; this difference in SEI scores was not statistically significant (t = -1.838, p = 0.070). The mean GHQ-12 scores of the first- and the fourth-year students were 2.24 ± 2.49 and 2.23 ± 2.70 , respectively; this difference in GHQ-12 scores was not statistically significant (t = 0.034, p = 0.973) (Table 2).

Scales	Scales Min Max		M ± SD	t	р
SAS					
Year 1	20.00	67.00 35.45 ± 8.40		4.536	0.001
Year 4	19.00	55.00	31.44 ± 6.78		
SEI					
Year 1	36.00	100.00	76.46 ± 12.52	-1.838	0.070
Year 4	36.00	100.00	79.76 ± 14.75		
GHQ-12					
Year 1	0.00	9	2.24 ± 2.49	0.034	0.973
Year 4	0.00	12.00	2.23 ± 2.70		

Table 2: Descriptive statistics for Pre- and Post-Tests SAS, SEI, GHQ-12.

SEI scores of the students was negatively correlated with their SAS (r = -0.432, p = 0.000) and GHQ-12 (r = -0.413, p = 0.000) scores, and these correlations were statistically significant. SAS scores of the students were positively correlated with their GHQ-12 scores, and this correlation was statistically significant (r = 0.233, p = 0.038) (Table 3).

Scales	SAS		cales SAS SEI		GHQ-12	
	r	р	r	p	r	р
SAS	-	-	432	0.001	.233	0.038
SEI	-	-	-	-	413	0.001

Table 3: Change in pre-test and post-test scores of SAS, SEI and GHQ-12. $r = Pearson\ correlation$

Discussion

The self-esteem, submissive behaviors, and mental problems of nursing students who went through a four-year undergraduate nursing program were investigated in this study. Self-esteem was accepted to be low when the mean score of self-esteem (SEI) was less than 50, and the level of self-esteem rises when this score is 50 and higher (14). In the present study, it can be considered that the mean SEI scores of the students were high at the beginning and at the end of the nursing program (76.46 ± 12.52 and 79.76 ± 14.75 , respectively). The mean SEI score increased at the end of the nursing program; however, this increase was not statistically significant (p > 0.05). The high self-esteem of the students can be explained by the following factors: the students achieved a university education, university and big city life provided them with various opportunities for self-development, most of them attended the nursing program willingly and they were pleased with their choices, and they were from nuclear families with not bad economic conditions [17,18]. It can be emphasized that self-esteem and satisfaction with the nursing profession are important aspects in the training of nurses, so that they are able to meet the new demands of the healthcare field [10]. In the nursing program in which the present study was performed, students participate in some optional social lessons in the university, and they participate in the clubs and trips of their interests. Their willingness to choose

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the nursing profession, their pleasure from this choice, their participation in social optional lessons, and opportunities provided by the big city life (trips, courses, and social activities) may account for the first-year self-esteem support in the students. In spite of these advantages, insignificantly increased self-esteem of the 4th class students may be explained by the intensive theoretical lessons and clinical applications involved in the program. In each class (from the first class until the end of the fourth class), the weekly program consists of five days of education (from Monday to Friday), and most of their time, during the week, is spent in school or in clinical practice. The first year mostly involves laboratory practice in the school, while clinical practice for hospital familiarization purposes is shorter in duration. In the subsequent years, basic professional lessons, mostly in the clinic, are more intensively given, along with their theoretical aspects. When our findings are considered, it may be concluded that the intensive nursing program, although helping to maintain the prior selfesteem level, did not cause it to increase significantly. Lees and Ellis [19] revealed that self-confidence and self-esteem were higher at the beginning of the nursing program and decreased with each subsequent year. Ghezelbash., et al. [20] found that students' self-esteem did not differ statistically for first to fourth year. Sasat., et al. [21] revealed that there were no differences in levels of self-esteem of students experiencing different parts of their training. In another study, it was reported that self-esteem was at its highest at the beginning of the first year, and lowest at the end of the last year [1]. Different results obtained in these studies may result from the differences in education programs and data collection tools. In the present study, the risk of mental problems of the students did not change significantly at the end of the education period. An intermediate risk of mental disorders (GHO-12) was detected in the measurements obtained at the beginning of the first year, and at the end of the fourth year. In addition, mental problem risk decreased (GHQ-12), while self-esteem (SEI) increased in this study. Low self-esteem is associated with depression, anxiety, and helplessness. Such individuals have low self-confidence, and they are pessimists in regard to their personal success and self-development [7]. In some studies, the level of stress was high in the students enrolled in a nursing program [22,23], and it was reported that they experienced difficulty in overcoming it [24]. In similar studies, students with low self-esteem were reported to experience more stress [25]. It is known that a high stress level, difficulties in overcoming it, and low self-esteem may lead to psychological problems [11,23]. In the present study, the self-esteem of the students may be considered to be higher when compared to similar studies. The fact that students have maintained their prior levels of self-esteem throughout the education period may facilitate overcoming difficulties during the education period, thus protecting their mental health.

In the present study, students' submissive behaviors significantly decreased at the end of the fourth year. Most of the participants were living apart from their families. When students are apart from their families throughout university training, they take more responsibility for their lives, and they become decision makers. During this period, students may have problems with the school and the environment they live in, as well as financial difficulties [26,27]. The separation from the family, being in a different environment, and making new friends cause greater difficulty in overcoming the challenges, and thus increase the stress level in the first years of university life [1,28]. This status of being inexperienced in new conditions may be the cause of higher levels of submissive behaviors at the beginning of the first year. However, the nursing program lessons that they take throughout their training, and the experiences they gain may cause the students to be stronger, which may decrease submissive attitudes. The involvement of such nursing program lessons that develop leadership, critical thinking, stress management, problem solving, communication skills, and self-recognition in addition to professional knowledge and the presence of advisor teachers and their interaction with the social environment may improve the students' self-confidence, while decreasing submissive acts [29]. Within the scope of the mentoring program of nursing training, a meeting is arranged for the first-year (mentees) and the fourth-year (mentors) students at the beginning of the first year. Mentors meet with their first-year students at the start of the program to show students around the campus and exchange contact information. Mentors and mentees then contact each other weekly as required to provide information and support. A nursing lecturer is available to support the mentors with regular contact over the 13 weeks of the program. The mentoring program supports the first-year students in adaptation to the university, decision making, self-confidence, and actively coping with stress [27,30]. In addition, throughout the nursing program, students have clinical practice in both the fall and spring terms. Their teachers are the supervisors during these clinical practices, and they work together with the patients, families, and the clinic staff. During this practice, students gain experience by determining problems, solving problems, and by

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observation. It may be considered that university life, adaptation to the university environment, increasing age, increase in clinical skills, adaptation to the hospital environment, and learning communication and stress management techniques cause the submissive attitudes of the students to decrease [17].

In this study, it was detected that submissive behaviors increase as self-esteem decreases. Similarly, in other studies investigating the relationship between self-esteem and submissive behaviors in the nursing students, submissive behaviors were determined to increase as self-esteem decreases [6,7]. Self-esteem is a positive emotional state that includes self-satisfaction, feeling worthy of being loved, self-confidence, and self-acceptance [6]. Submission includes the following attitudes: trying not to hurt others, trying to please everyone, inability to say 'no', inability to express anger, requiring confirmation for everything, inability to defend his/her rights and ideas, and being extremely giving [31]. When self-esteem is affected, the student develops an obedient attitude. Therefore, low self-esteem is a fundamental and significant reason for submissive behaviors.

The present study found that the risk of mental problems in the students increases as the submissive acts increase. Other studies also show a positive correlation between submissive behaviors and mental disorders in university students [32-34]. An individual who considers himself to be weak in his community prefers either to withdraw or to succumb under difficulties. That one starts to consider oneself weak causes internal frustration, social anxiety, hinders efforts to make new attempts, loss of self-confidence, and depression [7,34,35]. There are studies that provide evidence that depressed people see themselves as inferior to others and tend to adopt submissive behaviors [31,35].

Limitations

Although the study has provided some useful and interesting data, several limitations should be noted. The relatively small sample size precludes generalization beyond the study population. Additionally, this study examined only the selected characteristics of the individuals and environment. Many of the variables (stress level, sources of stress, and coping mechanisms) could account for differences in self-esteem, submissive behaviors, and mental problems of students. Scales were administered only at the start and at the end of the program, but not mid-classes. An annual evaluation of the scales could provide more reliable data about the changes in self-esteem, submissive behaviors, and mental problem scores throughout the program. Finally, no comparison group was used in the study; therefore, it is difficult to ascertain how self-esteem, submissive behaviors, and mental problem scores of nursing students are different from other populations in the university.

Conclusion

The nursing program did not cause significant changes in students' self-esteem and risk of mental problems, but it did decrease submissive behaviors. During the program, the risk of mental problems and the submissive behaviors of students decreased as self-esteem increased. On the other hand, as submissive behaviors increased, the risk mental problems increased, as well. There is a need to review the nursing curriculum and evaluate what impacts the students' self-esteem and mental health, to introduce strategies to reduce the risk of mental problems, and to increase self-esteem. Further studies may evaluate the changes mid-classes, by measurements performed during every class.

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Conflict of Interest

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