The Effect of Social Skills Education on Social Skills and Interpersonal Relationship Levels in Student Nurses

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Abstract

Background: Social skills educations are effective in improving social skills in individuals and reducing social anxiety levels and yielding positive changes in interpersonal relations, psychological well-being, and happiness levels and in reducing verbal aggression.

Aim: The study was conducted to determine the level of social skills of student nurses and to evaluate social skills education's effect on the social skills and interpersonal relationships of nursing students.

Methods: The quasi-experimental study was conducted with a non-randomized control group (CG) using a pre-test, post-test, and follow-up design. The research was conducted with 78 undergraduate nursing 1st year students at a nursing school in Türkiye. Eight weeks of social skills training program were applied to the experimental group (EG). The number, percentage, arithmetic mean and standard deviation, Chi-square, Kolmogorov–Smirnov test, Mann–Whitney U test, Friedman Test, and Wilcoxon Signed Ranks test were used for data analysis.

Results: The mean age of the students in the EG was 19.23 ± 2.09 and the mean age of the CG was 18.94 ± 1.02. It was determined that there was no difference between the groups in terms of their sociodemographic variables. While there was a significant increase in the social skills scores of the students who participated in the social skills training group because of the follow-up after the training and in the 4th month, no change was found in the CG. In the EG, the interpersonal relations scale showed a significant decrease in the toxic relationship style dimension in the 4th month follow-up but no change was detected in the CG.

Conclusion: As a result of the study, it was determined that the social skills training program had a positive effect on the social skill levels of the students and that the training program influenced the toxic relationship style in the 4th month follow-up test. In future studies, the social skills training program may be included peer learning or peer mentoring-based experiences.

Keywords: Interpersonal relation, nursing students, social skills, social skills training

Introduction

Social skills are defined as social behavior classes offered by the individual to act appropriately in interpersonal relationships. These social skills classes are self-recognition, communication, humility, having goals, empathy, working, and expressing positive emotions.[1] The development of social skills is a crucial step in individuals' personal and professional development because it helps them build better relationships.[2] For this reason, developing social skills is very important for the nursing profession to build skilled nurse-patient relationships and provide patient-centered and professional nursing care.[3,4]

An interpersonal relationship is a two-way exchange of verbal and/or nonverbal messages between at least two people, face-to-face or through communication devices.[5,6] Nurses are in constant communication with patients and their families, colleagues, and other health-care providers.[7] For this reason, the ability of nursing students to communicate effectively with patients is an essential skill that should be developed through education and practice[8] and is one of the basic competencies of nursing.[9,10] Effective communication ensures better collaboration among the health-care team, better patient outcomes, and better quality of patient care.[7] Poor interpersonal relationships and miscommunication within the healthcare team can lead to medical errors and adverse

events.[11] Social skills are required to establish a reliable nursing relationship.[3]

It is seen that the programs prepared for the development of social skills contribute to the development of individuals' social skills. In general, when relevant research was reviewed, it was determined that social skills education increases social skill levels in individuals,[2,12,13] decreases social anxiety levels,[14] causes positive changes in interpersonal relations,[15] psychological well-being[13] and happiness[16] levels and decreases verbal aggression,[17] increase in self-esteem and decrease in physical aggression,[18] and an increase in communication skills.[19]

For the nursing education process to continue at the desired level, the students' social skills such as being able to solve the problems faced during the education period, expressing themselves, exhibiting self-confident behavior, and communication skills are expected to have improved.[20] However, there are a limited number of studies evaluating the effect of social skills training on nursing students' social skills and interpersonal relationships in Türkiye. Therefore, this research was conducted to determine the social skill levels of student nurses and to evaluate the effect of social skills education on the social skills and interpersonal relationships of nursing students.

Research Hypotheses

H_1: The mean scores of the social skills inventory (SSI) of the students who received social skills training are higher than the mean scores of the students in the control group (CG).

H_2: The mean score of the nurturing relationship style of the students who received social skills training is higher than the mean score of the students in the CG.

H_3: The toxic relationship style mean scores of the students who received social skills training are lower than the mean scores of the CG students.

Methods

Study Type

This quasi-experimental study was conducted between October 2017 and May 2018 using non-randomized CG pre-test, post-test, and follow-up design methods.

Sample of the Study

The population of the research consisted of 100 1st year students enrolled in the nursing department of Aksaray University Faculty of Health Sciences in the 2017–2018 academic year. Social skills play an important role in establishing satisfying interpersonal relationships and realizing social goals when nursing students are just starting university. In this respect, 1st year nursing students were selected. The sample of the research consisted of nursing students who scored below the total score of the standard deviation (SD) value of the class average in the SSI and volunteered to participate in the study.

SSI, one of the criteria for determining the students to participate in the study, was applied collectively to 93 nursing department first graders on October 23–24, 2017. The scores of this inventory were analyzed by entering the Statistical Package for the Social Science (SPSS) and the arithmetic mean of the class ($X=282.97$) was determined based on the overall total scores. The sample group consisted of students with a mean (SD$=26.43$) below the total score. Eighty

students were found to be eligible to participate in the program. Among the members of this main group determined consisting of 80 students, 40 students were randomly assigned to the experimental and CGs, also considering voluntariness. In the later phase of the program, the study was completed with 78 students, excluding the data of one student from the experimental group (EG) who was absent in some sessions and one student from the CG who did not attend school.

Data Collection Tools

Student Information Form

This form, prepared by the researchers, consisted of 16 questions including the sociodemographic characteristics of student nurses such as age, the high school graduated from, gender, perceived economic status, number of siblings, and the education of parents, friend and family relations, and the attitudes of parents.

Social Skills Inventory

The adaptation, validity, and reliability studies of the SSI,[21,22] which was developed by Riggio in 1986 and revised in 1989, were carried out by Yüksel.[23] The 90-item scale designed to measure basic social skills measures six different dimensions of self-definition. All subscales of the scale, whose subscales are affective expression, affective control, affective sensitivity, social expression, social sensitivity, and social control, consist of 15 items and each item is evaluated with a score between 1 and 5. The lowest score that can be obtained from the inventory is 90, and the highest score is 450. The reliability coefficient calculated by the test repetition method was found to be $r=0.92$ for the whole inventory. Cronbach's Alpha coefficient for the total score was calculated as $r=0.85$, and the internal consistency coefficients obtained according to the subscales were calculated as $r=0.56$ and $r=0.821$.

Interpersonal Relations Scale

IRS was developed by Şahin et al[24] and consists of 31 items. In the factor analysis conducted to examine the validity of the scale, two sub-scales were identified as nurturing and toxic relationship styles, and the Cronbach's Alpha value of the nurturing relationship styles sub-scale was determined as $r=0.80$ and of the toxic relationship styles sub-scale as $r=0.81$. Scoring ranges from 0 to 3 for each item. A single score is not obtained from the scale and separate scores are obtained for the sub-scales of nurturing and toxic relationship styles. It was determined that the nurturing relationship styles sub-scale was open and respectful, and the toxic relationship styles sub-scale had two sub-dimensions, as sardonic and disrespectful. The score range of the nurturing relationship sub-scale ranges from 0 to 48, and high scores indicate a positive style in interpersonal relationships. The score range of the scale which belongs to the toxic relationship style varies between 0 and 45, and high scores indicate a negative style in interpersonal relations. The IRS Cronbach Alpha reliability coefficient was found to be $r=0.79$ and the split-half reliability was found to be $r=0.63$.[24]

Data Collection

The data collection and application flow plan chart of the research is seen in Figure 1. The groups were determined by agreeing with the students in the EG on the day, time, and place of the training program. The social skills training program, which aims to improve students' social skills, was created by researchers by scanning the relevant
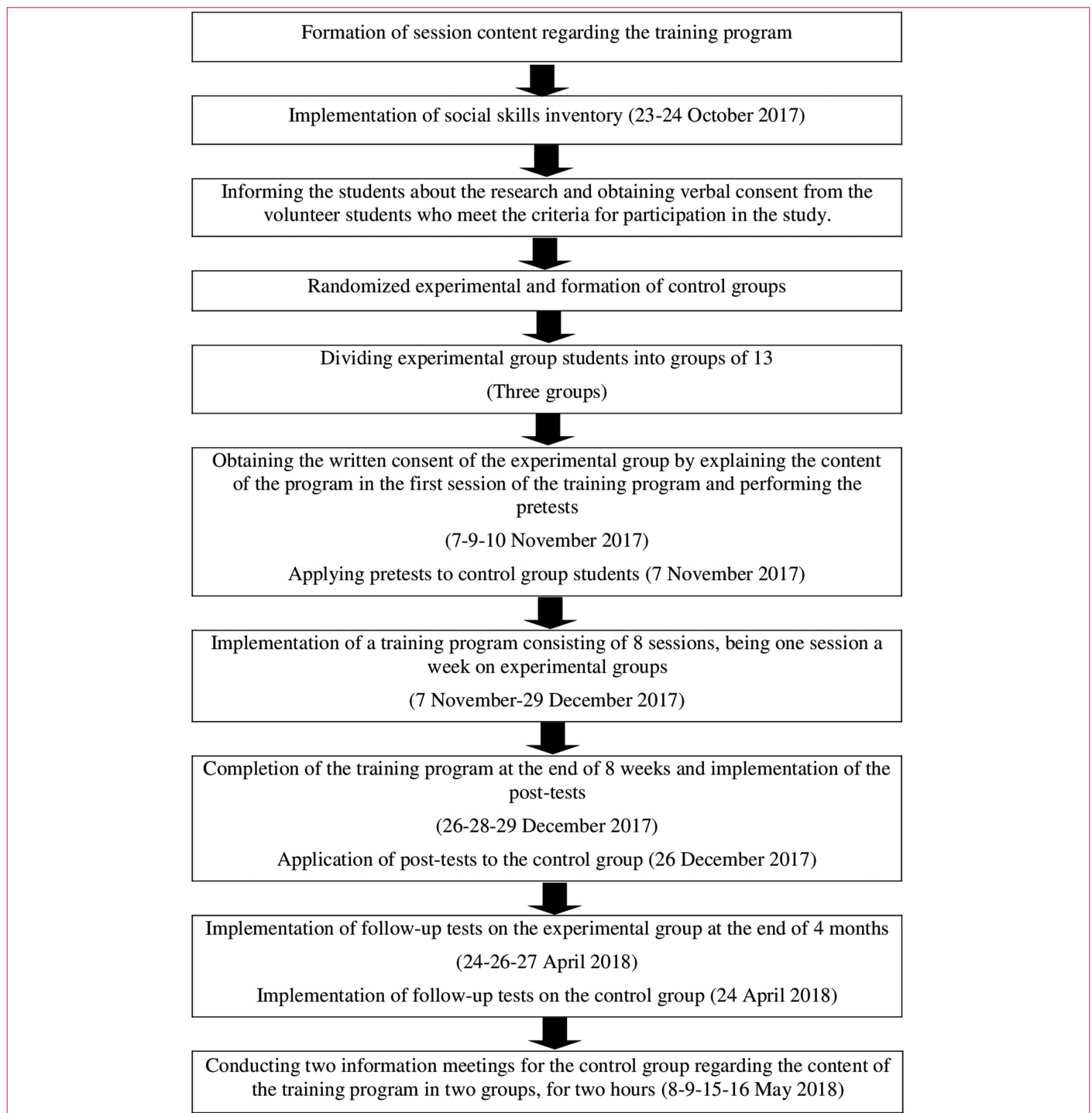
Formation of session content regarding the training program

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Implementation of social skills inventory (23-24 October 2017)

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Informing the students about the research and obtaining verbal consent from the volunteer students who meet the criteria for participation in the study.

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Randomized experimental and formation of control groups

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Dividing experimental group students into groups of 13 (Three groups)

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Obtaining the written consent of the experimental group by explaining the content of the program in the first session of the training program and performing the pretests (7-9-10 November 2017) Applying pretests to control group students (7 November 2017)

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Implementation of a training program consisting of 8 sessions, being one session a week on experimental groups (7 November-29 December 2017)

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Completion of the training program at the end of 8 weeks and implementation of the post-tests (26-28-29 December 2017) Application of post-tests to the control group (26 December 2017)

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Implementation of follow-up tests on the experimental group at the end of 4 months (24-26-27 April 2018) Implementation of follow-up tests on the control group (24 April 2018)

↓

Conducting two information meetings for the control group regarding the content of the training program in two groups, for two hours (8-9-15-16 May 2018)

Figure 1. The data collection and application flow plan chart of the research.

literature.[12,25-33] Training sessions were completed in eight sessions in total (determining group rules and functioning of the training program, knowing yourself, developing self-awareness, being assertive – being able to say no, establishing positive interpersonal relationships, accepting emotions, gaining effective problem-solving skills, and developing positive behaviors). Detailed information about each session topic and session goals is shown in Table 1. The sessions were held once a week, in three separate groups and with 13 students in the group room of the faculty, without interruption for approximately 90 min (each session). Data collection tools were applied at the beginning of the study and at the end of eight sessions. The trainings were conducted by the first researcher. The chairs in the group room were arranged in a circle so that the students could see each other completely.

Table 1. Social skills training program	
Session name	Purpose
Session 1: Meeting, determining group rules and functioning of the training program	• Getting to know each other • Description of the duration, frequency and location of the program • Knowing the expectations during the program process • To know their responsibilities in the program process • Determination of group rules and functioning of the training program • Administering pre-tests
Session 2: Know yourself	• Sharing their own characteristics • Willingness to plan their daily life • Establishing long-, medium, and short-term goals for their lives • Expressing positive behaviors that they need to develop in themselves for self-realization • Setting at least two positive goals for the future
Session 3: Developing self-awareness	• Making the distinction between emotion, thought and behavior • Gaining awareness for self-knowledge • To know the importance of self-knowledge in life
Session 4: Being assertive-being able to say no	• To be able to distinguish the characteristics of assertive, aggressive, passive, and manipulative behavior • Expressing their thoughts, feelings, and wishes with assertive behavior • Ability to express emotions appropriately without delay • Ability to say no without feeling guilty • Knowing the effects of being assertive on their lives
Session 5: Establishing positive interpersonal relationships	• To be able to realize the importance of correct expression in communication • To know the importance of getting appropriate feedback in interpersonal communication • To be able to define the concept of empathy • To know empathetic reactions in the face of given events • Ability to react empathetically in interpersonal relationships • To know how empathetic listening and empathetic response can affect their harmony in interpersonal relationships
Session 6: Accepting emotions	• Being aware of their emotions in the face of events • Controlling his/her emotions • Ability to express emotions accurately
Session 7: Gaining effective problem-solving skills	• To know the steps of problem solving • To be able to distinguish the effective and ineffective problem solving methods they use in the face of problems • To know how they solve their problems related to the problems they encounter • To know effective problem solving methods
Session 8: Developing positive behaviors	• Recognizing negative automatic thoughts • Knowing the effect of negative automatic thoughts on problem solving • Developing realistic, positive thoughts instead of negative automatic thoughts • The student's feedback on the achievements and suggestions received from the group sessions • Administering post-tests

Data Analysis

The data were analyzed in IBM's SPSS 24 (SPSS IBM, Türkiye) package program. Descriptive statistics such as number, percentage, arithmetic mean, and SD were used in the analysis of sociodemographic data. The Chi-square test was used to compare descriptive features between groups. The suitability of the sample to the normal distribution was evaluated with the Kolmogorov–Smirnov test, and it was found that the data did not fit the normal distribution ($P < 0.05$). Mann–Whitney U-test was used to compare the mean scale scores between groups, Friedman-test and Wilcoxon Signed Ranks-test with Bonferroni correction were used to compare the mean scale scores between groups. The $P < 0.05$ level was accepted as an indicator of significant difference with statistical decisions.

Ethical Consideration of the Study

This study was conducted in accordance with the principles of the declaration of Helsinki. Written permission was obtained from the Human Resources Ethics Committee of Aksaray University (Approval Nu: 2017/70, Date: 16.06.2017) to conduct the study. In addition, written institutional permission was obtained from the Deanship of Aksaray University Faculty of Health Sciences. In addition, the students within the scope of the sample were informed about the study and their consent was taken.

Results

Sociodemographic Characteristics of Mentees

According to Table 2, the mean age of the students in the EG is 19.23 ± 2.09, and the mean age of the CG is 18.94 ± 1.02. is in terms of sociodemographic variables such as age, high school graduated, gender, desire to continue the department, perceived economic status, number of siblings, place of residence at university, life, education of parents, being in a friend group, friend-family relationship, and parental attitudes, it was determined that there was no difference between the groups ($P > 0.05$). In addition, the majority of the two groups consisted of female students (EG=76.9), CG=64.1, and female students stated that they came to the department voluntarily (EG=87.2,

Table 2. Sociodemographic characteristics of students (n=78)

Characteristics	Experimental group (n=39)		Control group (n=39)		Test and *P*-value
	n	%	n	%	
Age (Mean±SD)	19.23±2.09		18.94±1.02		χ^2=0.289 *P*=0.591
Gender					
Female	30	76.9	25	64.1	χ^2=1.542 *P*=0.214
Male	9	23.1	14	35.9	
High school graduation					
Anatolian high school	28	71.8	26	66.6	χ^2=3.965 *P*=0.265
General high school	5	12.8	6	15.4	
Vocational health high school	4	10.3	1	2.6	
Vocational high school	2	5.1	6	15.4	
Desire to study nursing					
Yes	34	87.2	31	79.5	χ^2=0.831 *P*=0.362
No	5	12.8	8	20.5	
Number of siblings					
1–2 siblings	9	23.1	8	20.5	χ^2=4.224 *P*=0.121
3–4 siblings	23	59.0	16	41.0	
5 and more	7	17.9	15	38.5	
Place of residence					
City	15	38.5	19	48.7	χ^2=0.837 *P*=0.658
Town	13	33.3	11	28.2	
Village	11	28.2	9	23.1	
The state of perceiving one's own economic situation					
Good	4	10.3	11	28.2	χ^2=4.200 *P*=0.122
Moderate	33	84.6	27	69.2	
Low	2	5.1	1	2.6	
Place of residence in university life					
Government dorm	28	71.8	33	84.6	χ^2=3.277 *P*=0.351
Private dorm	5	12.8	1	2.6	
My family	3	7.7	2	5.1	
At home with my friends	3	7.7	3	7.7	
Mother's educational status					
University	3	7.7	2	5.1	χ^2=5.071 *P*=0.280
High school	6	15.4	5	12.8	
Secondary	11	28.2	5	12.8	
Primary	16	41.0	19	48.7	
Illiterate	3	7.7	8	20.6	

(*Continued*)

Table 2. Sociodemographic characteristics of students (n=78) (*Continued*)

Characteristics	Experimental group (n=39)		Control group (n=39)		Test and *P*-value
	n	%	n	%	
Father's educational status					
University	9	23.1	6	15.3	χ^2=2.571
High school	8	20.5	12	30.8	*P*=0.463
Secondary	6	15.4	9	23.1	
Primary	16	41.0	12	30.8	
Social activity status					
Yes	16	41.0	12	30.8	χ^2=0.891
No	23	59.0	27	69.2	*P*=0.345
The state of being a group of friends					
Yes	38	97.4	34	87.2	χ^2=2.889
No	1	2.6	5	12.8	*P*=0.089
Friend relationship status					
Good	35	89.7	30	76.9	χ^2=2.308
Moderate	4	10.3	9	23.1	*P*=0.129
Family relationship status					
Good	34	87.2	36	92.3	χ^2=0.557
Moderate	5	12.8	3	7.7	*P*=0.455
Evaluating mother's attitude					
Democratic	35	89.7	37	94.9	χ^2=0.722
Not democratic	4	10.3	2	5.1	*P*=0.395
Evaluating father's attitude					
Democratic	33	84.6	36	92.3	χ^2=1.130
Not democratic	6	15.4	3	7.7	*P*=0.288

SD: Standard deviation, χ^2: Ki-kare test, *P*: Significance level.

CG=79.5) and their economic status was moderate (EG=84.6, CG=69.2).

The Effect of Social Skills Education on Social Skills and Interpersonal Relationship Levels of the Students

The SSI nutritive and toxic relationship style pre-test, post-test, and monitoring scores of the experimental and CGs were compared no difference was found ($P > 0.05$) (Table 3). According to the post-test measurements, there was no difference between the groups in terms of the mean scores of feeding and toxic relationship styles ($P > 0.05$). However, in the post-test measurements, the SSI scores of the EG (292.76 ± 22.15) were statistically higher than the SSI (278.20 ± 26.65) scores of the CG ($P < 0.05$). The post-social skills training EG students' nurturing relationship style post-test score (33.15 ± 6.61) was higher than the post-test score of the CG students (31.61 ± 7.33) but the difference was not statistically significant ($P > 0.05$). Likewise, the toxic relationship style post-test scores of the post-social skills training program EG students (7.15 ± 4.14) were higher than the

post-test scores of the CG students (9.89 ± 6.62), but the difference between them was not statistically significant ($P > 0.05$). The nurturing relationship style follow-up test scores of the post-social skills education program EG students (33.56 ± 5.85) and the follow-up test scores of CG students (33.12 ± 5.74) were close. The toxic relation follow-up test scores of the post-social skills education EG (6.69 ± 4.85) were lower than the follow-up test scores of the CG students (9.07 ± 5.72) and the difference between them is statistically significant ($P < 0.05$).

When the mean scores obtained in the pre-test, post-test and follow-up measurements were compared, the mean SSI scores in the EG were significantly increased in statistical terms ($P < 0.05$). According to Wilcoxon Signed Ranks Test with Bonferroni correction, in the pre-test (277.33 ± 20.05)–post-test (292.76 ± 22.15) and pre-test (277.33 ± 20.05)-follow-up (292.71 ± 16.69) measurements, the difference between the SSI mean scores was found to be significant ($P < 0.05$). There was no difference between the mean scores of nurturing and toxic relationships of the EG obtained in the pre-test, post-test, and

Table 3. Comparison of pre-test, post-test, and follow-up mean scores of SSI, nurturing, and toxic relationship styles of experimental and control groups (n=78)

Scale	Experimental group (n=39) Mean±SD	Control group (n=39) Mean±SD	Test*/*P*-value
Social skills inventory			
Pre-test	277.33±20.05	275.56±23.29	z=−0.300/*P*=0.764
Post-test	292.76±22.15	278.20±26.65	z=−2.429/*P*=0.015
Follow-up	292.71±16.69	280.33±21.63	z=−2.580/*P*=0.010
Test**/*P*-value	z=16.271/*P*=0.000	z=1.200/*P*=0.549	
Nurturing relationship style			
Pre-test	32.48±5.38	31.43±5.85	z=−0.406/*P*=0.685
Post-test	33.15±6.61	31.61±7.33	z=−0.741/*P*=0.459
Follow-up	33.56±5.85	33.12±5.74	z=−0.020/*P*=0.984
Test**/*P*-value	z=0.803/*P*=0.669	z=4.731/*P*=0.094	
Toxic relationship style			
Pre-test	7.43±4.41	8.89±4.95	z=−1.169/*P*=0.242
Post-test	7.15±4.14	9.89±6.62	z=−1.901/*P*=0.057
Follow-up	6.69±4.85	9.07±5.72	z=−2.188/*P*=0.029
Test**/*P*-value	z=1.632/*P*=0.442	z=4.300/*P*=0.116	

SSI: Social Skills Inventory, SD: Standard deviation, *Mann–Whitney U test ($P<0.05$ for 0.010, 0.015 and 0.029), ** Friedman test ($P<0.001$ for 0.000), *P*: Significance level, Bold values provide statistical significance $P<0.05$.

follow-up measurements ($P > 0.05$). When the CG measurements were evaluated, no difference was found between the mean scores of SSI, nurturing, and toxic relationship style within the group ($P > 0.05$).

Discussion

It is known that the programs prepared for the development of social skills contribute to the development of the social skills of individuals.[2,12] In the study, it was found that social skills training program has a positive effect on students' social skill levels. Similarly, in a study in which a psychoeducation program based on professional socialization theory was applied, nursing students' social skill levels increased after the program.[12] In other studies in the literature, it was found that social skills training increased social skills and psychological well-being,[13] reduced social anxiety in adolescents,[14] and positively affected happiness levels.[16] In a study conducted with adolescent women, social skills education reduced the verbal aggression of adolescents but did not reduce physical aggression and did not increase self-esteem.[17] However, another study found that social skills training reduced physical aggression and increased self-esteem but did not affect verbal aggression.[18] It is seen that the programs prepared to improve social skills mostly contribute to the development of individuals' social skills.

When the social skills education was evaluated within the group according to time, it was seen that the social skills education applied to the EG made a significant difference in the follow-up of the post-test in the 4th month according to the pre-test mean scores. That the positive effect of the social skills education on the social skills of the students continued in the follow-up in the 4th month is an important

finding in terms of showing the permanence of the behaviors gained depending on the program. Similarly, it was found that the positive change in social skills of nursing students in the psychoeducation program persisted in the third and 6 months of follow-up.[12] Another study found social skills training to maintain effectiveness in the follow-up measurement conducted after a 2-month break.[13] In a study that found that social skills training effectively reduced adolescents' social anxiety, it was found that this effect persisted after a 6-week follow-up.[14]

In this study, no significant difference was found between the nurturing and toxic relationship style post-test mean scores of post-social skills education program experimental and CG students. While there was a significant difference between the experimental and CGs in the follow-up measurements of the students when the toxic relationship style mean scores were compared, there was no significant difference between the mean scores of nurturing relationship style. In the nursing department curriculum, the "Interpersonal Relations in Nursing" course is a compulsory course given to 1st-year students between February and June. The nutritional relationship style of the CG of the research suggests that the follow-up test was affected by this course. It is seen that social skills education affects toxic relationship styles in the long-term. In the study of Uzamaz and Güçray,[15] which examined the effects of social skills training on the level of interpersonal relationships of adolescents, it was found that social skills training had positive effects on students' interpersonal relationships, that it was effective when it came to nurturing relationships, but that it was not effective when it came to the sub-dimension of toxic relationships.[15]

It was found that anger control education based on a solution-oriented psychological approach to high school students had no significant effect on communication skills.[34] However, it was concluded that the training program applied to university students, aimed at improving communication skills integrated with creative drama and communication skills[35] positively affected students' communication skills. It was also found that the social skills education program affected the communication skills of high school student's positively.[19] Similarly, there was a significant change in the focus of audit levels of students who joined the human relations skills training program in line with internal auditing.[36] As can be seen in the studies, trainings based on direct communication lead to positive changes in individuals' communication skills. Communication education comprises skills such as using effective listening skills in communication, using the "I" language, being able to be concrete and avoiding abstract expressions, understanding the body language of others, being able to empathize with the individuals they communicate with and providing empathetic confrontation when necessary, giving reactions that express acceptance, understanding and respect, being able to become skillful at information based-rational decision-makings, being able to show reactions that express sincerity and to express emotions, resilience to criticism, rational evaluation of the criticism directed against one, being able to develop counter-criticism, and make self-criticism when necessary.

Limitations of the Study

Some limitations of this study need to be considered. The results of the data are limited to 78 nursing students studying in the 2017–2018 academic year. At the same time, the interaction between the experimental and CGs is one of the limitations of the study.

Conclusion

As a result, it was determined that the social skills training program applied to nursing students had an effect on the social skill levels of the students. In addition, it was found that the program had an effect on the toxic relationship style in the 4th month follow-up test. However, the program did not lead to any change in the nurturing relationship style levels of the students. In line with the results of the present study, it was suggested that this program could be used to increase the level of social skills and to reduce the level of toxic relationship style in nursing students. The social skills training program within the nursing educational program should be planned and implemented in order to support students' social skill development. In future studies, the social skills training program may be included peer learning or peer mentoring-based experiences.

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