The effect of a self-awareness and communication techniques course on the communication skills and ways of coping with stress of nursing students: An interventional study in Ankara, Turkey

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Abstract
Objective: To evaluate the effect of a self-awareness and communication techniques course on nursing students’ communication skills and their ways of coping with stress.

Methods: The interventional study was conducted at Gazi University, Ankara, Turkey, from February to May, 2016, and comprised second-year students in an undergraduate programme. Data was collected using the Student Information Form, Communication Skills Inventory, and Ways of Coping with Stress Inventory. The intervention course consisted of a 14-week curriculum and used rich educational methods. SPSS 20 was used for data analysis.

Results: Of the 123 subjects, 99 (80.5%) were females. The overall mean age was 20.00±1.00 years (range: 19-25 years). Overall, 65 (52.8%) subjects said they did not choose the profession of nursing voluntarily, while 81 (65.9%) were satisfied with their choice. The post-intervention scores were significantly different than the baseline scores (p<0.05).

Conclusion: The course was successful in increasing the students’ communication skills as well as their skills for actively coping with stress.

Keywords: Nursing students, Teaching methods, Communication skills, Coping with stress. (JPMA 69: 659; 2019)

Introduction
Trends in the nursing profession in the 21st-century are changing. Responsible nursing is not simply the ability to successfully carry out a series of routine procedures - be it taking a blood sample, dressing a wound or administering medication. Neither is it about treating the patient purely on a physical level. Nursing is a holistic process, taking into consideration not only the psychological, but also the socio-cultural and environmental features of a disease and its treatment.¹

Nursing is a health professional which relies on communication, knowledge and skills as vital tools that enable nurses to provide care to their patients.² Communication is integral to the nurse-patient relationship and is one of the fundamental values of nursing. It is widely accepted that building and maintaining a good patient relationship is an essential aspect of the treatment and healing process, and that effective communication skills are key to achieving this. Patients spend more time communicating with nurses than with any other healthcare professional. Within the nursing field, communication skills are considered to be indicative of best practice.³

Nursing involves activities and interpersonal relationships that are often stressful. Nursing has been identified as an occupation that has high levels of stress. Caring for clients who are experiencing high levels of anxiety can be stress-provoking for nurses. Coping has been viewed as a stabilising factor that may assist individuals in maintaining psychosocial adaptation during stressful events. Thus, the actual reaction to an environmental event may be as important as the event itself.³ In the hospital environment, different and complementary stressors have been evidenced in the nursing work process. The nursing work in the hospital environment is recognised as highly stressful. Several stressful conditions are linked to the responsibilities assigned to nursing; patient-care, decision-making, taking responsibility, and change. The nurse’s role has long been regarded as stress-filled based on the physical labour, human suffering, working hours, staffing, and interpersonal relationships that are central to the work nurses do.⁴

Nursing education programmes aim at training their professional members to produce information, access the information they need, and use this information for the benefit of the patients, as well as to create successful interpersonal relations alongside the capability for problem-solving and critical thinking. In this context, nurses and nursing students are expected to develop effective ways to cope with stress and excellent communication skills.⁵

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In addition to the expected conflicts experienced by university students during their training, nursing students may also face a number of unique problems due to the nature of their work. During a clinical practice in an intense and stressful hospital environment, students may be providing care to sick and deathly ill patients while having difficulties contacting educators and hospital staff. Individuals might experience stress when their personal resources become insufficient for coping with these difficulties.6 High levels of stress among student nurses can result in psychological distress, physical complaints, behavioural problems and lower academic achievement.7 Stress, coping with stress, and methods of reducing stress in nursing students are among the basic subjects being emphasised in the modern world. As a matter of both personal satisfaction and occupational success, it is important for nursing students to develop excellent communication skills and healthy ways to cope with stress. The current study was planned to examine the effect of a course on self-awareness and communication techniques on student nurses’ communication skills and ways of coping with stress.

**Subjects and Methods**

The interventional study was conducted at Gazi University, Ankara, Turkey, from February to May, 2016, and comprised second-year students in an undergraduate programme.

Those included were students who took the course and did not opt out midstream. Those who had already taken the course or who did not attend classes were excluded.

Permission was obtained from both the Dean of the Faculty of Nursing and the institutional review board, while written consent was taken from all the subjects.

The curriculum provided to students at the beginning of the term included information about the course objective, weekly course subjects, reading materials, requirements for book presentations and other assignments, and course evaluation calculation.

The course was facilitated using a variety of instructional techniques; standard lectures, presentations of informational slides, question and answer (Q&A), role playing, storytelling, homework, small group work, personal in-class work, discussions on film, music and poetry, and book presentations. Hard copies of all slide presentations were provided to the students at the end of the course. For in-class small group work and book presentations, students were divided into 12 groups. Group work was presented by the group leader to the entire class via prepared written reports. Students took it in turns to act as the group leader. For book presentations, each group selected a book from a predetermined list and made presentations via PowerPoint in accordance with the standard headers provided by the instructor. These headers were summary of the book, description of basic concepts in the book, discussion of basic messages in the book, identification of aspects which could be used as educational material, discussion of the book in relation to their own lives, discussion of the book in relation to the identity of ‘nurse’ or ‘healthcare staff’, identification of three relevant books (along with the names of authors) and a film. Following the presentations, the instructor and other students provided feedback. In their presentations, the students used interactive methods like humour, roleplaying, visual materials, video display, poetry and music recital. Students also decorated the presentation corner, distributed material to the audience, asked questions and solved puzzles.

Students completed homework covering lecture subjects every week. The students practised, in their daily lives and in clinical practice, the subjects covered in that week’s lecture and wrote about their experiences under the title of ‘My Story’ and shared them in class. The goal of this assignment was for the students to show their level of self-awareness and to record the use of communication and coping skills. Students presented their homework and shared their experiences in the first course hour every week beginning from the second week. The students were given feedback from their classmates and the researcher. The students giving presentations were supported and encouraged in terms of expressing themselves, using their communication skills, and managing their problems. With the help of homework, they were also provided opportunities to recall and reinforce subjects taught in the previous week before learning new subjects. The students filed their personal in-class work reports and homework reports throughout the term and submitted these personal files to the educator at the end of the term.

The self-awareness and communication techniques course (Annexure) was conducted over a 14-week period for three hours a week in the spring term of the second year of the nursing programme. For data collection, the Student Information Form, Communication Skills Inventory (CSI) and Ways of Coping with Stress Inventory (WCSI) were used as the tools. The language used in the forms was Turkish.

The Student Information Form was a self-generated proforma for collecting information about age, gender, preferences for the department of nursing, and mental...
Week One:
- Introduction
- Course introduction
- Pre-test
- Self-awareness and communication (Therapeutic Communication, Non-therapeutic Communication)
- Introduction of the Emotion List and hard copy provided to students
- Homework: Students were asked to determine their strengths and weaknesses and methods for improving their weaknesses, choosing one clinical or daily life experience regarding other occupational courses that they had taken, and writing under the title of "My Story Based on Self-Awareness and Communication." Assignments were added to their personal files.

Week Two:
- Homework presentation
- Social skills
- Personal work: In the social skills study, each student was asked to write their name vertically on a piece of paper, write a word describing themselves using every letter of their name, and write an essay describing themselves using these words. The essays were read in the classroom. The "love bombardment exercise" was made for every student making presentations. In this exercise, from the students positive views were presented to the spokesperson.
- Homework: The students prepared an essay entitled "My Advertisement." In this essay, they expressed positive distinct and striking characteristics about themselves in order to describe an individual preferred by the student environment. The students were asked to write their positive characteristics, essential aspects of their personalities, and tips for spending a good time with them. They wrote one of their clinic or daily life experiences regarding other occupational courses that they had taken under the title of "My Story Based on Social Skills" and added it to their personal files.

Week Three:
- Homework presentation
- Nonverbal behaviours
- Homework: The students were asked to observe themselves for one week in terms of their body language. They wrote one of their clinic or daily life experiences regarding other occupational courses that they had taken under the title of "My Story Based on Nonverbal Behaviours" and added it to their personal files.

Week Four:
- Homework presentation
- Explaining Emotions and Thoughts I (Empathy, Sympathy, Identification)
- Group work: Groups wrote empathic reaction examples to sample cases.
- Homework: The students were asked to write empathic reactions to two sample cases determined by the educator. They wrote one of their clinic or daily life experiences regarding other occupational courses that they had taken under the title of "My Story Based on Empathy" and added it to their personal files.

Week Five:
- Homework presentation
- Explaining Emotions and Thoughts II (Stress and Anger Management, Self-Confidence)
- Personal work: In the first stage, the students wrote about a recent experience of anger in the pattern of Event/Case-Thought-Emotion-Behaviour and presented it in the classroom. In the second stage, they were asked to continue the sample cases written in the first stage and create alternative thought patterns for those revealing anger, in order to reduce experiences of anger. They were asked to score the sense of anger created by the first thought and the alternative thought, on a scale to 100 points, and to compare the anger scores they gave in both situations.
- Homework: Students were asked to manage anger by finding an alternative thought in the chain of Situation-Thought-Emotion concerning the daily living situations. They were encouraged to remember that they were unique and had an important place in the world. They were supported to focus on their own success and to reward and appreciate themselves for small or big things they did. They wrote one of their clinic or daily living experiences regarding other occupational courses that they had taken under the title of "My Story Based on Stress and Anger Management" and added it to their personal files.

Week Six:
- Homework presentation
- Movie - "Patch Adams" (selected in parallel with the course subjects): Before the movie, the educator repeated the subjects discussed in previous weeks under general titles. The educator asked students to observe the concepts, emotions, and messages in the movie, its connections with nursing, and its aspects addressing their own lives. A discussion followed the movie.

Week Seven:
- Listening, Perceiving, and Interpreting
- Homework: Students sought feedback on their listening skills by talking to people in their environment, observing themselves, and evaluating their own listening skills. They wrote one of their clinic or daily living experiences regarding other occupational courses that they had taken under the title of "My Story Based on Listening, Perceiving and Interpreting" and added it to their personal files.

Week Eight:
- Homework presentation
- Assertiveness
- Homework: Students were asked to recall a past situation where their behaviour demonstrated passivity or aggressiveness and to determine why they responded so in that situation. Students were encouraged to find opportunities to act assertively. Students wrote one of their clinic or daily living experiences regarding other occupational courses that they had taken under the title of "My Story Based on Assertiveness" and added it to their personal files.

Week Nine:
- Homework presentation
- Movie - "Dead Poets Society": Before the movie, the educator reinforced subjects discussed in previous weeks under general headings. The educator asked students to look for examples of those concepts, emotions, and messages in the movie, the movie's connections with nursing, and any aspects addressing their own lives. A discussion followed the film.

Week Ten:
- Patient Communication, Communication with Patients on Special Conditions
- Homework: Students wrote one of their clinic or daily living experiences regarding other occupational courses that they had taken under the title of "My Story Based on Communication With Patients on Special Conditions" and added it to their personal files.

Week Eleven:
- Homework presentation
- Book presentations (groups 1, 2, 3)

Week Twelve:
- Book presentations (groups 4, 5, 6)

Week Thirteen:
- Book presentations (groups 7, 8, 9)

Week Fourteen:
- Book presentations (groups 10, 11, 12)
- Post-test
health diagnoses.

The CSI is a 45-item scale for determining the level of individuals' communication skills in their interpersonal relations on cognitive, emotional, and behavioural dimensions. The Likert-type responses are always (5), generally (4), sometimes (3), rarely (2) and never (1).8 The Cronbach alpha coefficient calculated for the purpose of determining the internal consistency was 0.72. The validity coefficient was 0.70. The scores obtained from the CSI can vary between 45 and 225. Higher scores signify a higher level of communication skills. The highest score to be obtained from each subscale is 75; the lowest is 15. The three subscales are cognitive, emotional and behavioural communication skills.

The WCSI determines the methods used by individuals for coping with general or distinct stress conditions.9 The psychometric evaluations of the inventory were carried out in Turkey.10 In this 30-item Likert-type inventory, responses are categorised in four divisions ranging from 'not at all appropriate; to 'very appropriate'. No total score is obtained from the inventory; instead, scores are calculated separately for each of the 5 subscales: Self-Confident Approach (SCA), Unconfident Self-Approach (Helpless approach) (UCSA), Submissive Approach (SA), Optimistic Approach (OA), and the Seeking Social Support Approach (SSSA). The inventory measures coping ways through two main lenses: 'problem-focussed/active' and 'emotion-focussed/passive'. While active approaches are indicated by SSSA, OA and SCA subscales, passive approaches are indicated by UCSA and SA subscales. Efficient stress management is associated with predominant selection of SCA and OA whereas individuals who are unable to efficiently cope with stress select SA and UCSA. The Cronbach alpha reliability coefficients of the WCSI subscales were determined as: OA-0.68; SCA-0.80; UCSA-0.73; SA-0.70; and SSSA-0.47.10

Data obtained was evaluated using SPSS 20. Kolmogorov-Smirnov test was used to check the normal distribution of data. Nonparametric Wilcoxon signed rank test was applied to check significant difference between pre-test and post-test mean scores of the cognitive subscale of CSI and SCA, SA, OA, SSSA subscales of WCSI. Paired sample t-test was used to compare the differences of means between the pre-test and post-test scores of emotional and behavioural subscales of CSI, total score of CSI and UCSA subscale of WCSI. Pearson’s correlation coefficient for the normal distribution of variables and Spearman’s correlation coefficient for the non-normal distribution of variables were used to determine the relationship between CSI and WCSI. P<0.05 was considered significant.

**Results**

Of the 123 subjects, 99(80.5%) were females. The overall mean age was 20.00±1.00 years (range: 19-25 years). Overall, 65(52.8%) subjects said they did not choose the profession of nursing voluntarily, while 81(65.9%) were satisfied with their choice. There was a significant

| Table 1: Descriptive statistics for Pre- and Post-Test, Communication Skills Inventory (CSI) and Ways of Coping with Stress Inventory (WCSI). |
|-------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                                  | Mean ± SD       | Min. ± Max.     | Test           |
| **CSI**                                         |                 |                 |                 |
| Cognitive                                       |                 |                 |                 |
| Pre-test                                        | 51.7±4.49       | 40.00±62.00     | Z=-2.410       |
| Post-test                                       | 52.7±3.49       | 44.00±62.00     | P=0.016        |
| Emotional                                       |                 |                 |                 |
| Pre-test                                        | 48.9±4.81       | 35.00±64.00     | t=1.247        |
| Post-test                                       | 48.4±4.12       | 37.00±62.00     | P=0.215        |
| Behavioural                                     |                 |                 |                 |
| Pre-test                                        | 50.0±4.19       | 39.00±67.00     | t=-5.075       |
| Post-test                                       | 51.8±4.10       | 40.00±62.00     | P=0.000        |
| Total                                           |                 |                 |                 |
| Pre-test                                        | 150.7±6.96      | 125.00±186.00   | t=-2.743       |
| Post-test                                       | 153.0±8.85      | 126.00±180.00   | P=0.007        |
| **The Ways of Coping with Stress Inventory**    |                 |                 |                 |
| Self-Confident Approach (SCA)                   |                 |                 |                 |
| Pre-test                                        | 13.3±3.74       | 6.00±21.00      | Z=2.011        |
| Post-test                                       | 13.6±3.77       | 4.00±21.00      | P=0.044        |
| Unconfident Self-Approach (UCSA)                |                 |                 |                 |
| Pre-test                                        | 9.9±3.98        | 2.00±19.00      | t=2.020        |
| Post-test                                       | 9.26±3.95       | 2.00±19.00      | P=0.046        |
| Submissive Approach (SA)                        |                 |                 |                 |
| Pre-test                                        | 5.84±2.94       | 0.00±13.00      | Z=-0.693       |
| Post-test                                       | 5.72±2.92       | 1.00±13.00      | P=0.488        |
| Optimistic Approach (OA)                        |                 |                 |                 |
| Pre-test                                        | 8.40±3.05       | 1.00±15.00      | Z=-1.861       |
| Post-test                                       | 8.90±2.83       | 1.00±15.00      | P=0.063        |
| Seeking Social Support Approach (SSSA)          |                 |                 |                 |
| Pre-test                                        | 6.61±1.65       | 1.00±11.00      | Z=-0.162       |
| Post-test                                       | 6.59±1.41       | 3.00±10.00      | P=0.871        |

Z=Wilcoxon signed rank test, t=paired sample t-test, SD=Standard deviation.
difference between baseline and post-intervention mean scores of cognitive and behavioural subscales as well as the total CSI score (p<0.05 each), but the difference in the emotional subscale was not significant (p>0.05).

There was a significant difference between baseline and post-interventions scores in terms of SCA and UCSA subscales of WCSI (p<0.05 each), but here were no significant difference in SA, OA and SSSA subscales (p>0.05) (Table-1). A positive relationship was obtained between cognitive skills and SCA (p=0.047). Similarly, there was a positive correlation between behavioural skills and SA (p=0.042) and between emotional skills and SSSA (p=0.004) (Table-2).

**Discussion**

Communication skills are accepted as a core competence for nursing professionals who work directly with patients. Nurses should efficiently use communication skills in order to present appropriate nursing care, support patients and increase patient satisfaction. A nurse’s good communication skills can also increase the confidence of the patients. The present study observed that communication skills of nursing students were enhanced after the course. As a result, self-awareness and communication techniques course could arguably be used as a guide for nursing students in their use of communication skills and application in clinic settings. The students who gave presentations were supported in expressing themselves, using communication skills and managing their problems through humour, roleplaying, visual material and video display. The students were also encouraged to use communication skills mentioned in the classroom in their daily living and clinical environment. They presented written appraisals of their own use of the communication skills in the classroom and received constructive feedback from their classmates and the researcher. The use of humour in the presentations of both the researcher and students aimed at creating an environment of trust in the classroom, which has been shown to increase students’ social, physical, and emotional welfare. This sense of safety may have encouraged students to learn and use the skills. Creative educational methods like origami, humour, roleplaying, and other interactive methods may have enabled students to understand and internalise complicated concepts better.

Nurses experience a higher number of stressors and exhibit higher stress levels than other healthcare professionals, and this high stress level can adversely affect the health of nurses. Academic achievement, clinical practices and interpersonal relations are noted as stressors of nursing students. As a result, several studies recommend conducting stress management programmes and providing skill training for students.

Strengthening students for coping with stress via a course which was already integrated into the curriculum is an important advantage of this study. Students were not expected to allocate extra time outside of their regular coursework; they worked through an intense curriculum but not at the risk of overworking themselves enough to cause subject losses. According to results of the present study, nursing students used the SCA more than UCSA in coping with stress at the end of the course. This change indicates that the course helped the students develop self-confidence and enabled them to address stressful problems from multiple perspectives. The course subjects and interactive methods used in teaching these topics support this idea. In fact, studies have revealed that humour can reduce stress and tension in the classroom.

### Table-2: Communication Skills Inventory (CSI) and Ways of Coping with Stress Inventory (WCSI) correlations.

<table>
<thead>
<tr>
<th></th>
<th>SCA</th>
<th></th>
<th>UCSA</th>
<th></th>
<th>SA</th>
<th></th>
<th>OA</th>
<th></th>
<th>SSSA</th>
<th></th>
</tr>
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<tbody>
<tr>
<td></td>
<td>r</td>
<td>P</td>
<td>r</td>
<td>p</td>
<td>r</td>
<td>p</td>
<td>r</td>
<td>p</td>
<td>r</td>
<td>p</td>
</tr>
<tr>
<td>Cognitive</td>
<td>0.180*</td>
<td>0.047</td>
<td>-0.024*</td>
<td>0.795</td>
<td>0.058*</td>
<td>0.525</td>
<td>0.156*</td>
<td>0.084</td>
<td>-0.034*</td>
<td>0.705</td>
</tr>
<tr>
<td>Emotional</td>
<td>-0.001*</td>
<td>0.989</td>
<td>0.008*</td>
<td>0.282</td>
<td>0.131*</td>
<td>0.148</td>
<td>0.041*</td>
<td>0.651</td>
<td>0.261*</td>
<td>0.004</td>
</tr>
<tr>
<td>Behavioural</td>
<td>0.049*</td>
<td>0.593</td>
<td>-0.005**</td>
<td>0.956</td>
<td>0.184*</td>
<td>0.042</td>
<td>0.072*</td>
<td>0.427</td>
<td>-0.060*</td>
<td>0.512</td>
</tr>
<tr>
<td>Total</td>
<td>0.132*</td>
<td>0.145</td>
<td>0.045**</td>
<td>0.623</td>
<td>0.148*</td>
<td>0.101</td>
<td>0.131*</td>
<td>0.148</td>
<td>0.108*</td>
<td>0.234</td>
</tr>
</tbody>
</table>

*Spearman Correlation Coefficient, **Pearson Correlation Coefficient.

SCA: Self-Confident Approach
UCSA: Unconfident Self-Approach
SA: Submissive Approach
OA: Optimistic Approach
SSSA: Seeking Social Support Approach
increase self-image and self-esteem\textsuperscript{21,22} and enable students to actively cope with stress.\textsuperscript{23} In the present study, the students had the opportunity to reveal themselves during in-class activities, in daily life while doing their homework, and in interpersonal relations in clinics, all while gaining practice in problem-solving. They also received feedback from their colleagues and the researcher on their experiences in the classroom. Reflecting on their experiences and stories may have positively affected their ability to cope with stress. Additionally, students may have increased their coping skills while listening to other’s stories and expressing their opinions and providing feedback.

In the present study, as cognitive communication skills increased, SCA in coping with stress also increased. Cognitive skills include self-confidence, self-disclosure, assertiveness and problem-detection. Thus, cognitive skills show a parallel with SCA, which includes making correct decisions and struggling. Also, in the study, SSSA was determined to be correlated with emotional communication skills which include trusting people and being open to criticism. Similarly, in another study, individuals actively using communication skills could cope with stress better, and they experienced fewer communication problems.\textsuperscript{24} In the present study, as the level of behavioural communication skills increased, SA also increased. SA is characterised by believing in the failure of solving problems and giving up on struggle. Behavioural communication skills, on the other hand, include listening skills related to body language (eye contact, tone of voice). It could be argued, then, that SA did not decrease due to this shallowness in behavioural skills in the present study.

In a study on communication skills and ways of coping with stress, as cognitive and behavioural skills increased, so did SSSA, SCA and OA. Moreover, as emotional skills increased, SA decreased.\textsuperscript{25} In the present study, on the other hand, no correlation was observed between cognitive skills and SSSA and OA. Besides, the increase in emotional skills did not cause a decrease in SA in the present study. In that case, the increase in emotional skills supported the students in coping with stress by either increasing SSSA or decreasing SA.

The current study is important as it examined the use of a variety of atypical simultaneous interactive educational methods and revelation of the possibility of developing individual communication skills and ways of coping with stress in a large group setting. Similar studies can be conducted by using these methods in communication courses in different nursing programmes.

\section*{Conclusion}

The intervention course was successful in increasing the students' communication skills as well as their skills for actively coping with stress. Using these teaching methods is recommended for similar courses and for conducting studies in the future.

\section*{Disclaimer}

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\section*{Conflict of Interest}

None.

\section*{Source of Funding}

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\section*{References}


16. Deshpande RC. A healthy way to handle work place stress...


