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SOCIAL INTELLIGENCE, SELF-EFFICACY, AND STRESS-COPING STYLES AS PREDICTORS OF EMOTIONAL INTELLIGENCE IN NURSING STUDENTS: A DESCRIPTIVE STUDY

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Abstract: This study aims to determine the level of emotional intelligence, social intelligence, self-efficacy, and stress-coping strategies in nursing students, as well as investigate the relationship of emotional intelligence with these variables. The study design was a descriptive relational type. Data were collected from 322 students recruited from one nursing faculty and one faculty of health sciences. Nursing students' total emotional intelligence score mean (127.73±15.33) was above average. Social intelligence, self-efficacy, and a self-confident coping style were important predictors of emotional intelligence (p<0.05). This study presented an important finding on how nursing students could improve their emotional intelligence in the vocational training process considering the factors that may be associated with emotional intelligence.

Keywords: Emotional intelligence, Social intelligence, Self-efficacy, Stress-coping style, Nursing students

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1. Introduction

Nursing is considered a challenging and stressful profession (Yamani et al., 2014; Moreland and Apker, 2016). Many studies have indicated that nurses' high levels of occupational stress result in feelings of inadequacy, self-doubt, lack of self-confidence, nervousness, depression, somatic discomfort, sleep disorders, and burnout (Watson et al., 2008; Codier et al., 2011). Becoming a nurse is stressful; studies have shown that nursing students have difficulty in balancing family/work life with academic and financial stress factors (Bandadi et al., 2020). Many nursing students experience significant emotional distress leading to gradual separation and voluntary withdrawal in the later stages of the program (O'Donnell, 2009). In addition, nursing students need interpersonal communication skills to manage individuals' care demands during clinical practices within the course (Rankin, 2013).

Emotions are at the center of healthcare delivery. Nurses maintain communication with individuals in an environment containing emotional burdens (James, 2018). It is critical to consider all data including emotions in a profession where nurses can face life-or-death decisions. In nursing practice, the value of emotion can be clearly expressed using the conceptual framework of emotional intelligence (Powell, 2015). Previous studies were emphasized that individuals with higher emotional intelligence scores tended to have more advanced social abilities, richer forms of social communication, and more effective coping strategies (Meng and Qi, 2018; Kikanloo et al., 2019).

"Emotional intelligence", also known as emotional-social intelligence, is a subunit of social intelligence that indicates individuals' ability to critique the feelings of themselves and of those around them (Salovey and Mayer, 1990). In other words, Emotional Intelligence (EI) includes a two-way therapeutic interaction. First, it addresses an individuals' comprehension level of their own emotional reactions, and the method of expressing this emotion effectively and accurately. Second, it reflects how individuals understand the emotional reactions that arise in their interaction with others, and the power to cope with the daily changing emotional load in the face of events. Within the framework of this interaction, EI can be defined as "the sum of interrelated emotional and social competencies, skills, and facilitators" (Bar-On, 2006). In this context, EI is an important part of nursing care because of therapeutic communication. Nurses who are exposed to emotional burden loads from different sources (individual characteristics, communication with

healthcare team members, individuals with care needs, etc.) in their mental infrastructure have a dynamic working environment. Therefore, EI is an important factor that needs to be discussed with all its aspects for quality nursing care (James, 2018). The emotions that guide care within holistic nursing care are considered to play a key role in the development and maintenance of social relations. Thus, nursing students and nurses need to have a professional unifying perspective to be able to cope with the intense emotional demands they face in clinical-field practice and in work environments, and not experience failed communication with individuals (Thomas and Natarajan, 2017; El Dashan et al., 2020; Talman et al., 2020).

Social intelligence is as important as emotional intelligence in meeting the demands that arise in interpersonal relationships and in improving communication skills. Social intelligence, defined as "the ability to act wisely in human relationships" (Won et al., 2018) is divided into two categories: "social awareness" and "social ability". What we feel about others is defined as "social awareness" and what we do about that awareness is defined as "social ability" (Goleman, 2006). People who understand social environment well, interact and communicate with other individuals more successfully. Social intelligence improves social interaction and is therefore one of the most important factors in predicting success in the lives of many people (Won et al., 2018). There is a relationship between an individual's level of social intelligence, leadership traits, and interpersonal communication experiences, and it affects the individual's social problem-solving ability (Eshghi et al., 2013). Conversely, individuals with high levels of social intelligence have the ability to understand other people's moods, wishes, desires, joys, resentments, and urges as well as the ability to adjust their behavior accordingly and get along and communicate well with others. Therefore, individuals with strong social intelligence can collaborate with members within a group, can work with them in harmony, and can effectively communicate with them verbally and non-verbally (Wawra, 2009).

Nurses/nursing students, who integrate EI and social intelligence into health care realize how they can cope with their own emotions, how these emotions are affected by the social environment, and how these emotions affect the social environment. A nurse with these qualifications not only provides emotional support to healthy/unhealthy individuals and their families in clinical and field environments, where learning is multidimensional, but also guides them on how to cope with their emotional burden (Ali and Ali 2016). Emotional intelligence, which strengthens nursing care, is equally important in improving an individual's skills and problem-solving abilities (Kaya et al., 2017; Lee and Noh 2017). Researchers have reported many other reasons that emotional intelligence may be related to efficient nursing care. A previous study investigated the relationship between and found that there was a significant correlation between these two variables (Beauvais et al., 2011). In this context, improving emotional intelligence skills can help nurses cope with a stressful and exhausting healthcare environment, and with the emotional demands that can potentially cause burn out (Kikanloo et al., 2019). Current studies have shown a relationship between emotional intelligence, stress, coping strategies, well-being, and mental health (Kikanloo et al., 2019; El Dahshan et al., 2020). For example, a previous study has found that nursing students with higher EI had lower levels of perceived stress (Foster et al., 2018). On the other hand, nursing students with lower EI had poor coping skills; and therefore, experienced more stress (El Dashan et al., 2020).

In the present study, another factor considered to be associated with emotional intelligence is self-efficacy. Self-efficacy is defined as an individual's own judgment on the ability to achieve a certain level of performance (Bandura, 2001). Regarding the concept of self-efficacy, Bandura (1997) stated that "individuals' strong abilities and beliefs are associated with being healthy and successful". One study reported that emotional intelligence was positively associated with self-efficacy, and that both variables could predict each other (El-Sayed et al., 2014). Self-efficacy is a good indicator to improve clinical skills and to help to overcome the challenges in nursing students (Alavi, 2014). Bandadi et al. (2020) noted that between perceived stress and emotional self-efficacy were negatively correlated. The findings of that study have also shown that stress management failure, increased ineffective anxiety, and stress are direct consequences of low self-efficacy (Salovey et al., 2002). The nurse students with high emotional intelligence can control their emotions when necessary and appropriately cope with problems. It is suggested that even though one cannot consider self-efficacy as a component of emotional intelligence, at least, one should not ignore the relationship between self-efficacy and emotional intelligence. Previous relevant studies have emphasized that further research is needed to clarify which components of emotional intelligence play a more significant role in explaining changes in self-efficacy (Shipley et al., 2010).

Therefore, this study aims to determine the level of emotional intelligence, social intelligence, self-efficacy and stress-coping styles as well as to investigate the relationship between emotional intelligence and these variables in a sample of nursing students.

1.1. Study Questions

Study questions are presented below;

1. What are nursing students' emotional intelligence, social intelligence, self-efficacy levels and stress-coping styles?

2. Is there a relationship between the levels of emotional intelligence, social intelligence, self-efficacy and stress-coping styles in nursing

students?

3. Is social intelligence, self-efficacy levels and stress-coping styles a determinant of emotional intelligence level?

2. Material and Methods

2.1. Design, Sampling and Data Collection

The study design was a descriptive relational type. The study included students at the nursing faculty and faculty of health sciences of two universities in the Central Anatolia region of Türkiye. Universities were determined by purposive sampling method. The curriculum and vocational training programs of the nursing faculty and the nursing department of health sciences faculty included in the sample were similar. The study population included 357 fourth-year students; 155 from the nursing department of health sciences faculty-A and 202 were from the nursing faculty-B. The study was completed with 322 students with a participation rate of 90%. Nursing students in their fourth year were chosen because they have the ability to integrate the professional knowledge and nursing philosophy gained during their four-year nursing education into nursing practice. Nursing students in their fourth year were included because they have the potential to use their professional knowledge and nursing philosophy learned throughout their four-year nursing education. The post hoc power analysis of the study was calculated using the G*Power 3.1.9.2 program (Faul et al., 2007). As a result of the calculation carried out using the research data, where the total number of samples was 322, the correlation value between emotional intelligence and social intelligence of the research was calculated as 0.307, and the power of the research (1-β) was calculated as 0.99 with a 5% margin of error (a = 0.05) for the correlation analysis.

Data were collected in the class environment between 01/05/2019 and 31/05/2019. Questionnaire forms were distributed to students who wanted to participate. The questionnaires were completed within 20-25 minutes.

2.2. Data Collection Tools

2.2.1. Personal information form

The personal information form consisted of five questions on individuals' sociodemographic characteristics (age, gender, perception of school success, family type, perception of economic status).

2.2.2. Schutte emotional intelligence scale

The original Schutte Emotional Intelligence Scale was developed with 33 items by Schutte et al. (1998). It was later revised to 41 items by Austin et al. (2004). The Turkish adaptation and the measurement validity and reliability study of this scale was carried out by Tatar et al. (2011). The Cronbach's alpha internal consistency coefficient was found to be 0.82 for the entire scale, and 0.75, 0.39, and 0.76 for the subscales. The test-retest reliability coefficient for the entire scale was found to be r=0.49 with one-week intervals, and r=0.56 with two-week intervals. Five-Factor Personality Inventory was

used on 100 people along with the scale to investigate the scale's distinctive validity. There were significant relationships between the Schutte Emotional Intelligence Scale and personality characteristics ranging from -0.28 to 0.34. This 5-point Likert scale consisted of 41 items (1-Strongly Disagree, 2- Disagree, 3- Neither agree nor disagree, 4- Agree, 5- Strongly Agree). The scale had a three-factor structure. These were defined as the regulation of optimism/mood, the use of emotions, and the evaluation of emotions. The lowest possible score on this scale was 41 and the highest was 205. Higher scores indicate higher emotional intelligence (Tatar et al., 2011).

2.2.3. Stress coping style scale

Stress Coping Style Scale (SCSS) is a 4-point Likert-type scale with 66 items, which is frequently used in studies on coping with stress. It was developed by Folkman and Lazarus (1980) and the original name was "Ways of Coping Inventory (WCI)". This scale, which was adapted for university students in Türkiye by Şahin and Durak (1995) with the latest name of "Scale of Stress-Coping Styles", consists of 30 items. The scale consists of five subscales: self-confident style, optimistic style, helpless style, submissive style, seeking social support. Cronbach's alpha reliability coefficient was found to be as follows: optimistic style was 0.68, self-confident style was 0.80, helpless style was 0.73, submissive style was 0.70, and seeking social support was 0.47 (Şahin and Durak, 1995).

SCSS is a 4-point Likert-type scale with 30 items. The scale requires a Likert-type rating between 0-3 (0 = 0%, 1 = 30%, 2 = 70%, and 3 = 100%). The 9th item ("I do not want anyone to know the bad situation I'm experiencing") is reversed-scored. Each subscale has its own score and no overall score is calculated. The scores taken from the subscales are as follows: 21 points for the self-confident style, 15 points for the optimistic style, 24 points for the helpless style, 18 points for the submissive style, and 12 points for the seeking social support. Higher scores obtained from the subscales indicated that the individual used that style more (Şahin and Durak, 1995).

2.2.4. Tromso social intelligence scale

The Tromso Social Intelligence Scale was developed by Silvera et al. (2001) and translated into Turkish by Doğan (2006). The internal consistency reliability coefficient of the scale was 0.83, and the reliability coefficient of the total score calculated by the test-retest method was 0.80 for the entire scale. The exploratory factor analysis conducted to assess the construct validity of the scale showed that the scale had a three-factor structure as in its original form and the subscales explained the 44.79% of the total variance.

The scale was a 5-point Likert-type scale with 21 items (1-strongly disagree 2-disagree 3- neutral 4-agree 5-strongly agree) and three subscales - social information processing with 8 items, social skills with 6 items, social awareness with 7 items. The scale items 2, 4, 5, 8, 11, 12, 13, 15, 16, 20, and 21 were reverse-scored. The lowest score possible on this scale was 21, and the highest score

was 105.40 Higher scores indicated a higher level of social intelligence (Doğan, 2006; Doğan and Çetin, 2009).

2.2.5. Self-efficacy scale

The Self-Efficacy Scale was developed by Sherer and Madduks (1982) and was adapted to Turkish by Gözüm and Aksayan (1999). The Self-Efficacy Scale is a 5-point Likert-type self-assessment scale. Cronbach's alpha internal consistency coefficient, which included all expressions of the scale, was found to be 0.81, and the test-retest reliability coefficient was found to be r=0.092. The factors yielded by the Varimax rotation of the factors arising from the 4-Factor Analysis, the eigenvalue of which was at least 1 in the construct validity analysis of the scale, explained 44.6% of the total variance.The participants were asked to select one of the options for each item in the 23-item 5-point Likert-type scale: 1. "This never describes me", 2. "This describes me a little", 3. "I am neutral", 4. "This describes me well", 5. "This describes me very well". The scoring of the items 1, 3, 8, 9, 13, 15, 19, 21, 23 was carried out based on the points given to these items. However, items 2, 4, 5, 6, 7, 10, 11, 12, 14, 16, 17, 18, 20, 22 were reverse-scored. The scale had four subscales: beginning the behavior, sustaining the behavior, completing the behavior, struggling against the barriers.The lowest score possible on this scale was 23, and the highest score was 115. Higher scores indicated that the individual's perception of self-efficacy was at a good level. The scale had four subscales (Gözüm and Aksayan, 1999).

2.3. Statistical Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) software. The number of units (n), percentage (%), mean (standard deviation), range, and median were given as summary statistics. The normal distribution of the data was evaluated by the Kolmogorov Smirnov test and Q-Q graph. The Spearman correlation analysis was performed correlation between emotional intelligence, social intelligence, self-efficacy, and coping styles. Linear regression analysis was used in the predictors of emotional intelligence. The value $P<0.05$ is considered statistically significant.

3. Results

3.1. Sociodemographic Characteristics of Students

Of the students, 83.2% were female, 55.9% had moderate academic success, 87.6% had nuclear families, and 62.7% had income that was equal to expense (Table 1).

3.2. Emotional Intelligence, Social Intelligence, Self-Efficacy Levels and Coping Styles of the Students

Students' total emotional intelligence [127.7 (15.3)], social intelligence [67.5 (9.1)] and self-efficacy [66.6 (11.2)] scores were above average. Students' top three stress coping styles were self-confident style [12.7 (3.8)], helpless style [11.1 (4.4)], and optimistic style [7.9 (2.7)] (Table 2).

3.3. Correlation Between Students' Emotional Intelligence, Social Intelligence, Self-Efficacy and Stress-Coping Styles Mean Subscale Scores

A highly significant positive correlation was observed between the total emotional intelligence mean score and social intelligence, self-efficacy and stress-coping styles subscale total mean scores (Table 3).

3.4. Linear Regression Analyses

On analyzing the predictors of total emotional intelligence; total social intelligence ($\beta=0.368$, P=0.000) and self-efficacy scores ($\beta=0.194$, P=0.000) were found to be the best predictors of self-confident style, which is a stress-coping styles ($\beta=0.194$, P=0.006). As the social intelligence, self-efficacy, and self-confident style scores increased, the emotional intelligence score increased as well. Variables were found to explain 30% of emotional intelligence (F= 20.971, P=0.000) (Table 4).

Table 1. Distribution of descriptive characteristics of nursing students (n=322)

Characteristics	n	%
University		
A Faculty (nursing)	155	48.1
B Faculty (nursing)	167	51.9
Gender		
Female	268	83.2
Male	54	16.8
Perception of academic achievement		
Good	128	39.8
Moderate	180	55.9
Poor	14	4.3
Family type		
Core	282	87.6
Extended	31	9.6
Broken	9	2.8
Economic situation		
Income less than expenses	82	25.5
Income equal to expenses	202	62.7
Income more than expenses	38	11.8

Table 2. Means and standard deviations of emotional intelligence, social intelligence, self-efficacy, and styles of coping

Scales	Mean ±SD	Minimum- Maximum	Median
Emotional intelligence			
Regulation of emotions Utilization of	41.72±6.10	12-56	42.00
emotions	16.35±3.77	6-29	16.00
Appraisal of emotions	27.44±5.87	10-45	27.00
Total emotional intelligence	127.73±15.33	41-186	126.00
Social intelligence			
Social information processing Social	28.99 ±4.52	8-40	29.00
skills	19.08±3.08	6-30	19.00
Social awareness	27.88±6.95	10-50	28.00
Total social intelligence	67.55±9.13	21-105	67.00
Self-Efficacy			
Beginning the behavior Sustaining the	20.89±6.29	8-38	21.00
behavior	18.54±5.14	7-31	19.00
Completing the behavior Struggling	17.96±3.50	5-25	18.00
against the barriers	9.22±2.15	3-15	9.00
Total self-efficacy	66.63±11.22	23-105	66.00
Coping Style			
Self-confident style	12.77±3.89	3-27	13.00
Optimistic style	7.99±2.75	0-17	8.00
Helpless style	11.19±4.41	0-30	11.00
Submissive style	6.77±3.28	0-26	7.00
Seeking social support	6.83±1.97	1-16	7.00

Table 3. Correlation between emotional intelligence, social intelligence, self-efficacy, and coping styles

Variables	1	2	3	4	5	6	7	8
1.Total emotional intelligence	1							
2. Total social intelligence	0.370**	1						
3. Total self-efficacy	0.205**	0.134*	1					
4. Self-confident style	0.216**	0.127*	-0.066	1				
5. Optimistic style	0.175**	0.197**	-0.021	0.677**	1			
6. Helpless style	0.166**	0.263**	0.121*	-0.212**	-0.164**	1		
7. Submissive style	0.164**	0.241**	0.253**	-0.159**	0.037	0.553**	1	
8. Seeking social support	0.262**	0.282**	-0.011	0.354**	0.255**	0.229**	0.175**	1

*=P<0.05, **=P<0.01.

Table 4. Predictors of emotional intelligence

Variables	β	t	P
Constant		80.20	0.000
Total social intelligence	0.368	70.01	0.000**
Total self-efficacy	0.194	30.95	0.000**
Self-confident style	0.194	20.78	0.006*
Optimistic style	0.-069	-10.03	0.302
Helpless style	0.034	0.54	0.585
Submissive style	0.109	10.77	0.077
Seeking social support	0.054	0.96	0.337
R^2= 0.317 Adjusted R^2= 0.301 F=20,791 P<0.000			

*=P<0.05, **=P<0.01.

4. Discussion

Emotional intelligence refers to an individual's ability to solve problems and regulate behavior by monitoring, identifying, and using emotional information of their own or those of others. EI is an essential practical nursing skill in the health care process that nurses utilize and is vital for "high-quality nursing services" (Savel and Munro, 2016). A study confirms that nursing students' improvement of EI can improve their clinical competence, including communication (Farshi et al., 2015). This study was conducted to investigate the relationship between nursing students' emotional intelligence and their social intelligence. self-efficacy, and stress-coping styles. The comparison was made with a limited number of studies because there was a limited number of studies on emotional intelligence with these variables. The discussion was formed within the context of social intelligence, self-efficacy, and stress-coping variables that were thought to be related to emotional intelligence.

One must have self-awareness (self-consciousness) and the ability to regulate emotions to achieve a high level of emotional intelligence. Emotional intelligence is the basis of social intelligence that includes social awareness (Goleman et al., 2002). Without well-developed self-awareness and self-control, it is not easy to develop social intelligence (Bar-On, 1997). The present study found that there was an advanced level of positive significance between emotional intelligence and social intelligence; this result supports the results of the relevant literature (Table 3). In their study on university students, Won et al. (2018) have found a statistically significant positive correlation between emotional intelligence and social intelligence (Won et al., 2018). Nursing students begin work in an emotionally intense environment. In such an environment, nursing students with high emotional and social intelligence can better help individual's cope and positively affect their care. The synergy of these two variables will positively affect the quality of healthcare.

Nursing is a stressful profession. Nursing students face the realities of working as a healthcare professional at an early stage in practice environments (Foster et al., 2018; Kikanloo et al., 2019). The top three coping styles that nursing students used most to cope with stress in the present study were the self-confident style, the helpless style, and the optimistic style (Table 2). Thomas and Natarajan (2017) has reported that emotional intelligence had a positive effect on the stress coping mechanisms. A study found that the difference in total EI scores between first-year and fourth-year nursing students was statistically significant and that interpersonal and stress management subscale scores of the fourth-year students were higher than first-year students. These findings illustrated that undergraduate nursing students had EI scores within the emotional and socially effective functioning capacity in each of the four years of the nursing program. A study on working nurses found a significant relationship between emotional intelligence and coping styles. Nurses who used problem-focused coping styles were reported to have a higher emotional intelligence score than those who used emotion-focused and avoidance style (Larijani et al., 2017). Other studies have also reported that high emotional intelligence was associated with greater use of adaptive coping (Enss et al., 2018; El Dashan et al., 2020). A study conducted by Por et al. (2011) has noted that two-thirds of the students reported they often felt nervous and stressed. This high level of stress may be due to individual differences in emotional intelligence (Por et al., 2011). Another study pointed out that emotional intelligence was a protective factor for clinical nurses in coping with pressure. Higher EI was reported to help nurses accurately describe their emotions and effectively change their own moods to prevent negative moods from affecting the work environment (Birks et al., 2009). Another study found that individuals with higher EI could better regulate and express their own emotions as well as better understand the individuals they interact with emotionally. The studies in the literature reported that there was a link between increased stress and low EI including physiological indicators of perceived stress and stress that was reported among students (Ruiz-Aranda et al., 2014; Enns et al., 2018).

Similar to the findings of the present study, another study found that there was a low-level positive significant relationship between the emotional assessment dimension and the self-confident style, optimistic style, helpless style, submissive style, and the seeking social support subscales in working nurses (Çankaya and Çiftçi, 2019). In this context, the inclusion of programs that improve nursing students' emotional intelligence levels in their curriculum can both increase the level of professional readiness and contribute to coping with the emotional burden of the profession.

The comparison was made with a limited number of studies since there were a limited number of known studies on this subject. Self-efficacy reflects the level of confidence in finishing tasks based on the skills in which individuals have mastered (Conner, 2015; Farshi et al., 2015). In general, self-efficacy affects work stress, burnout, and satisfaction in clinical nurses (Alavi, 2014). The present study found a positive correlation between emotional intelligence and self-efficacy (Table 3). A study stated that self-efficacy plays an intermediary role between emotional intelligence and clinical communication skills in clinic nurses (Zhu et al., 2016). Meanwhile, a study investigating the relationship between self-efficacy and emotional management reported that higher self-efficacy results in stronger emotional management ability, and accordingly, lower self-efficacy results in weaker emotional management ability (El-Sayed et al., 2014). The development of self-efficacy in emotional management suggests that it may affect emotional intelligence.

5. Conclusion

In the present study, it is significant that nursing students' total emotional intelligence scores were above average in terms of their ability to cope with the emotional burden of the profession. These findings have a significant impact on how nursing students will experience emotions in the early stages of their careers. Additionally, the present study findings support that the relationship of emotional intelligence with social intelligence, self-efficacy, and stress-coping styles is important. However, for the development of emotional intelligence, students need to be supported in this respect during the education process.

Author Contributions

Concept: A.S.T. (25%), N.A.G. (25%), E.E. (25%) and N.L. (25%), Design: A.S.T. (25%), N.A.G. (25%), E.E. (25%) and N.L. (25%), Supervision: A.S.T. (25%), N.A.G. (25%), E.E. (25%) and N.L. (25%), Data collection and/or processing: A.S.T. (40%), N.A.G. (30%) and E.E (30%), Data analysis and/or interpretation: A.S.T. (30%), N.A.G. (40%) and N.L. (30%), Literature search: E.B.G (%50) and N.K. (50%), Writing: A.S.T. (25%), N.A.G. (25%), E.E. (25%) and N.L. (25%), Critical review: A.S.T. (25%), N.A.G. (25%), E.E. (25%) and N.L. (25%), Submission and revision A.S.T. (25%), N.A.G. (25%), E.E. (25%) and N.L. (25%). All authors reviewed and approved final version of the manuscript.

Conflict of Interest

The authors declared that there is no conflict of interest.

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Ethical Approval/Informed Consent

Research was conducted in line with the Declaration of Helsinki and Good Clinical Practice. Ethical permission was obtained from the University Faculty of Health Sciences Non-Interventional Clinical Research Ethics Committee (Number: 2019/611) and institutional permits were obtained from institutions. Voluntary informed consent form was added at the beginning of the questionare form.

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Limitations

Only two nursing faculties were included in this study which represented a small sample. Therefore, the results cannot be generalized to all other nursing schools, and the results may not represent other nursing students.

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