

# An Examination of the Relationship between Anger, Stress, Hopelessness and Perceived Social Support in Nursing Students

## Hemşirelik Öğrencilerinin Öfke, Umutsuzluk, Stresle Baş Etme Düzeyleri ile Sosyal Destek Algıları Arasındaki İlişkinin İncelenmesi

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### SUMMARY

**Objectives:** This study aims to examine the relationship between the levels of stress and feelings of anger and hopelessness experienced by nursing students and the perceptions they have of the provision of social support.

**Methods:** The study sample included 231 nursing students studying in the nursing department of a university's Vocational School of Health from October to November, 2011. Data for the study were collected using a personal information form, the Hopelessness Scale, the Multi-dimensional Scale of Perceived Social Support, the Coping with Stress Scale and the State-Trait Anger Expression Inventory. For evaluation of the data, t test, ANOVA and Pearson's correlation analysis tests were used.

**Results:** Findings from the analysis showed that to cope with stress, female students engaged in social support activities and sought spiritual guidance, while male students applied passive coping mechanisms, such as denial, substance abuse and humor. The levels of perceived social support were determined to be higher in the students who were between the ages of 19 and 21 ( $p<0.05$ ), and the anger-in scores were found to be higher in the students who were between the ages of 22 and 24 and in fourth-year students ( $p<0.05$ ). Students whose parents held strong democratic attitudes were demonstrated to have low levels of hopelessness and higher perceptions of social support ( $p<0.05$ ).

**Conclusion:** The increased number of effective coping mechanisms for dealing with stress and the higher positive perceptions of social support in nursing students leads to the development of suitable behavior for coping with stress and the diminishment of feelings of hopelessness. The study found that when nursing students have a greater perception of social support they express their anger in an appropriate way and are able to cope with stress effectively. Therefore, it is recommended that relevant training programs be organized to individually empower students.

**Keywords:** Anger; hopelessness; nursing students; perceived social support; stress.

### ÖZET

**Amaç:** Bu araştırmada, hemşirelik öğrencilerinin öfke, umutsuzluk ve stresle baş etme düzeyleri ile algılanan sosyal destek düzeyleri arasındaki ilişkinin belirlenmesi amaçlanmıştır.

**Gereç ve Yöntem:** Tanımlayıcı tipte olan bu çalışmada örnekleme Bir Üniversitenin Sağlık Yüksekokulu'nda Ekim-Kasım 2011 tarihinde öğrenim görmekte olan 231 hemşirelik bölümü öğrencisi oluşturmuştur. Veri toplama aracı olarak, anket formu, Beck Umutsuzluk Ölçeği (BUÖ), Sürekli Öfke ve Öfke İfade Tarzı Ölçeği (SÖİTÖ), Stresle Başa Çıkma Ölçeği (SBÇÖ) ve Çok Boyutlu Algılanan Sosyal Destek Ölçeği (ÇBASDÖ) kullanılmıştır. Verilerin değerlendirilmesinde, t-testi, ANAVO, Pearson's korelasyon analizi testleri kullanılmıştır.

**Bulgular:** Erkek öğrenciler stresle baş etmede yadsıma, madde kullanımı, mizahi yaklaşım gibi stresle etkin olmayan baş etme yöntemlerini kullanırken, kız öğrencilerin sosyal destek arama ve dine yönelme aktivitelerini kullandıkları, 19–21 yaş arasındaki öğrencilerin algılanan sosyal destek düzeyinin daha fazla olduğu ( $p<0.05$ ), 22–24 yaş aralığında ve 4. sınıfta olan öğrencilerin öfke içe vurum puanlarının daha yüksek olduğu ( $p<0.05$ ), anne-baba tutumlarını demokratik yönde algılayan öğrencilerin umutsuzluk düzeylerinin diğerlerine göre daha düşük ve sosyal destek algılarının daha yüksek olduğu belirlenmiştir ( $p<0.05$ ).

**Sonuç:** Öğrencilerin stresle etkili baş etme ve sosyal destek algılarının artması, umutsuzluk düzeylerinin azalmasına ve stresle etkili baş etme davranışlarının gelişmesine yol açmaktadır. Çalışmamızda öğrencilerin algılanan sosyal destek algısı arttıkça stresle daha etkili baş etme ve öfkeyi uygun biçimde ifade ettikleri gösterilmiştir. Bu nedenle öğrencilerin bireysel olarak güçlenmelerine yönelik eğitim programlarının düzenlenmesi önerilir.

**Anahtar sözcükler:** Öfke; umutsuzluk; hemşirelik öğrencileri; algılanan sosyal destek; stres.

### Introduction

University life marks a period in individual development when diverse changes are experienced all at once and adult

roles and responsibilities are assumed. During this period, factors like departure from family and friends, establishment of new social relations, adoption of an independent life, as well as excessive course loads and an intense academic environment, can negatively affect students and thereby, require them to strengthen their coping skills.<sup>[1,2]</sup>

University-level nursing students may experience frustration, strain, and disappointment due to the traumatic and stressful circumstances they encounter during both the application and actual education process and the biopsychosocial development process.<sup>[3,4]</sup> These sources of stress experienced by students in their learning processes may negatively affect

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their professional identity development and health<sup>[4-6]</sup> and potentially undermine their thinking and problem solving skills, which in turn will decrease their academic achievement<sup>[3,7]</sup> and cause them to feel unsafe, angry, desperate, hopeless, lonely, and unsupported.<sup>[6,8]</sup> Social relations and the qualities of perceived social support play an important role in facilitating the ability of students to overcome these problems they feel or experience.<sup>[9,10]</sup>

Perceived social support is the awareness of the presence of support sources needed by an individual. As a biopsychosocial factor, perceived social support is important insofar as it has a major impact on one's sense of social acceptance and self-esteem, as well as on one's ability to bring a certain degree of sustainability and certainty to their life, to limit or balance the harm caused by stressful life events and to protect mental health.<sup>[9-14]</sup>

Numerous studies have demonstrated that students who encounter a multitude of stressors in many different areas manifest efficient coping patterns and make use of social support resources, the results of which have proven to be strong means for preventing and treating mental and behavioral problems.<sup>[15,16]</sup> Social support not only decreases stress and anxiety levels of students, but also increases the sense of control and the desire to try new ways of coping with stress, reduces despair and hopelessness and increases self-confidence, sense of satisfaction and productivity,<sup>[13,17]</sup> all of which help students to feel valuable, to develop a healthy identity and to succeed in their professional practices.

In nursing education, students are expected to confidently communicate, cope with stressful events efficiently, express their anger in a healthy way, have an optimistic view on life, make plans and arrive at their own decisions and demonstrate positive attitudes. Given that nursing students are tasked with the future responsibility of protecting and developing community health, it is important that they use social support resources in an efficient and timely manner, as these resources play an important role in enabling them to efficiently cope with stressors caused by personal issues and professional practices, conveniently express and control anger, have a greater sense of confidence in their ability to fulfill objectives and plans in life, develop a stronger ego and sense of self-sufficiency and provide more efficient and a higher quality of service in their professional practices.<sup>[16]</sup>

In this study, results from analysis of the data shall serve to determine the behaviors nursing students adopt to cope with anger, hopelessness and stress and to reveal the relationship these variables have with perceived social support in order that proper measures may be taken to decrease the negative effects these variables have on students. To successfully achieve this outcome, it is important that nursing students be

sufficiently aware of this issue. Should the results show there to be a correlation between social support and the behaviors that nursing students who are in the process of occupational identity development adopt to cope with hopelessness, anger control and internal and external stresses, then it may be possible to lower the levels of hopelessness through the aid of interventions that serve to develop social support for coping with stress and anger control.

The literature features a number of studies that address the factors affecting the ability of nursing students to cope with stress<sup>[3-5,7,10,15,17-19]</sup> and their perceptions of social support levels.<sup>[9,15,17,18]</sup> Among these studies, however, there are none that investigate the relationship between stress, hopelessness, anger control and perceived social support. Therefore, this study seeks to provide answers to the following questions: "How do nursing students cope with the hopelessness, anger, and stress experienced in their personal and/or educational environments?" and "Is there a relationship between the levels of hopelessness, anger and ability to cope with stress and perceived social support resources?"

## Materials and Method

### Sample

This study was designed as a descriptive and quantitative study for the purpose of examining the relationship between hopelessness/anger levels and ability to cope with stress and perceived social support in nursing students studying in the nursing department of a university's Vocational School of Health. The population of the study consisted of 341 nursing students studying during the fall term of the 2011–2012 academic year. As the study involved no sample selection process, it was completed on the basis of the 231 nursing students, approximately 67.7% of the population, who agreed to participate in the study.

### Data Collection Tools Used in the Study

The data were collected using a personal information form featuring 12 questions on socio-demographic characteristics, the Multi-Dimensional Scale of Perceived Social Support (MSPSS), the Beck Hopelessness Scale (BHS), the Coping with Stress Scale (CSS) and the State-Trait Anger Expression Inventory (STAXI).

*Personal Information Form:* The Personal Information Form includes a total of 12 questions on the descriptive characteristics of students (like age, gender, residence type, family type, socio-economic level, educational level of parents, number of children in family, surviving parents and parental attitudes).

*Beck Hopelessness Scale (BHS):* Developed by Beck, Weissman, Lexter and Trexler in 1974 for measuring the negative expectations individuals have about the future, the scale consists of 20 items.<sup>[20]</sup> The validity and reliability study for the

Turkish version of the scale was conducted by Seber, Dilbaz, Kaptanoğlu and Tekin in 1993.<sup>[21]</sup> As a result of the analyses, the Cronbach's alpha coefficient was determined to be  $\alpha=.86$  for reliability, while the Pearson product-moment correlation was determined to be  $r=.73$  at the end of the retest. The range of possible scores to obtain on the scale varies between 0–20, with higher scores indicating a high sense of hopelessness in individuals. In the reliability analysis conducted in the present study, the Cronbach's alpha coefficient was determined to be .84.

*Multi-Dimensional Scale of Perceived Social Support (MSPSS)*: The Multi-Dimensional Scale of Perceived Social Support was developed by Zimet et al. (1988) and adapted into Turkish by<sup>[18]</sup> Eker, Akar and Yıldız (2001) for the purpose of conducting validity and reliability studies.<sup>[22]</sup> This scale consists of 12 items, which serve to evaluate the sufficiency of social support, as perceived from three different sources, namely, family, friends, and significant others.<sup>[18]</sup> Results from the validity and reliability study conducted as part of the adaption of the scale into Turkish, the Cronbach's alpha coefficient was determined to be .85. The reliability analysis conducted in the present study, however, found the Cronbach's alpha coefficient to be .87.

*Coping with Stress Scale (CSS)*: Developed by Carver et al. (1989), the CSS consists of 15 subscales, which seek to examine the responses and coping mechanisms of individuals who are under difficult and stressful conditions. Each subscale has four items and is scored separately.<sup>[23]</sup> Gök (1995), who adapted the scale to make it fit for Turkish culture and conducted its validity and reliability study, omitted 2 subscales, leaving the final version with 13 subscales.<sup>[24]</sup> In Gök's validity and reliability study, the total score internal consistency coefficient was determined to be .78 for the scale while in the reliability analysis conducted for the present study, the Cronbach's alpha coefficient was determined to be .86 for the overall scale.

*State-Trait Anger Expression Inventory (STAXI)*: The STAXI is a self-assessment inventory of 34 items that measures the sense and expression of anger. It was developed by Spielberger (1983), and Özer (1994) conducted the validity and reliability study for the Turkish version,<sup>[25]</sup> for which the Cronbach's Alpha values calculated for the subscales were determined to be .79 for the subscale of "Trait Anger", .84 for the subscale of "Anger-control in", .78 for the subscale of "Anger Expression-in" and .62 for the subscale of "Anger Expression-out". In the reliability analysis conducted for the present study, the internal consistency coefficient was determined to be .80 for the overall scale.

### Data Collection

The objective of the study was explained to the students

in face-to-face interviews, and the data collection forms were completed by them after obtaining their written consent. In order to conduct the study, written permissions were obtained from the Directorate of the Health Vocational School and the Research Commission of the Health Vocational School (no. 111, dated 20.10.2011).

### Data Assessment

The SPSS 15.0 software package was used for analysis of the data. Since mean scores obtained from the scale (in the Kolmogorov-Smirnov and Shapiro-Wilk tests) showed a normal distribution, parametric tests were used. The BHS, STAXI, CSS and MSPSS scores of the students functioned as the dependent variables, while their socio-demographic characteristics (grade, age, gender, parents' education etc.) functioned as the independent variables. Number and percentage distributions were used in defining the socio-demographic data of the students. The scores obtained by the students on the scales according to their gender, age, student-year level, family type, number of siblings, surviving parents, residence type, socio-economic level and their parents' level of education and attitude approach to parenting were compared by using the independent samples t-test between two

**Table 1.** Socio-demographic Characteristics of the Students (n=231)

Characteristics	n	%
Year of study		
1 <sup>st</sup> year	79	34.2
2 <sup>nd</sup> year	57	24.7
3 <sup>rd</sup> year	42	18.2
4 <sup>th</sup> year	53	22.9
Gender		
Female	178	77.1
Male	53	22.9
Age		
17-19	65	28.1
20-22	111	48.1
23+	55	23.8
Number of children in family		
3 or below	158	68.4
4 or above	73	31.6
Mothers' educational level		
Did not complete primary school	35	15.2
Primary school	157	68.0
High school or higher	39	16.8
Fathers' educational level		
Did not complete primary school	8	3.5
Primary school	134	58.0
High school or higher	89	38.5
Surviving parents		
Both alive	222	96.1
Mother/father deceased	9	3.9
Mothers'/fathers' attitude		
Protective	157/116	68.0/50.2
Authoritarian	26/54	11.3/23.4
Democratic	46/49	19.9/21.2
Unconcerned	2/8	0.9/3.5
Total	231	100.0

**Table 2.** BHS, STAXI, MSPSS and CSS Mean Scores of the Students (n=231)

Scales	Min.–Max.	Mean±SD
BHS	0–19	4.19±3.86
MSPSS Total Score	29–84	65.06±12.02
Family support	5–28	24.13±4.07
Friend support	4–28	21.67±4.50
Significant other support	4–28	19.25±7.51
CSS		
Subgroups of efficient coping		
Active coping	7–16	11.49±1.96
Planning	6–16	12.24±2.19
Focusing on problem	5–16	10.17±2.13
Positive reinterpretation	7–16	12.66±2.13
Seeking social support (instrumental)	5–16	11.97±2.46
Subgroups of non-efficient coping		
Seeking social support (emotional)	4–16	10.84±2.51
Acceptance	4–16	10.28±2.54
Orientation towards religion	4–16	13.64±2.45
Focusing on and manifesting emotions	4–16	11.56±2.63
Denial	4–13	6.96±2.13
Behavioral disconnection	4–13	6.64±1.89
Alcohol/substance abuse	4–16	4.87±2.25
Humorous approach	4–15	7.17±2.46
STAXI		
Trait anger	10–40	23.25±5.74
Anger expression-in	9–29	17.30±4.19
Anger expression-out	8–32	17.18±4.22
Anger control	13–32	21.79±4.76

BHS: Beck Hopelessness Scale; STAXI: State-Trait Anger Expression Inventory; MSPSS: Multi-Dimensional Scale of Perceived Social Support; CSS: Coping with Stress Scale; Min.: Minimum; Max.: Maximum; SD: Standard deviation.

groups and the One-Way ANOVA analysis between 3 and more groups. Furthermore, the relationships between students' hopelessness, anger control, ability to cope with stress and perceived social support levels were calculated through the Pearson's correlation analysis.

## Results

A majority of the students in the study were between the ages of 20–22 (48.1%), female (77.1%), in their first year of study (34.2%), living in a nuclear family (85.3%), staying at state dormitories (40.7%), and had mothers who were primary school graduates (68%) and fathers who were the same (58%) and had three siblings or less (68.4%). To continue, 83.5% of them reported a moderate socio-economic level, 96.1% had living parents, 68% had mothers whose attitudes were protective and 50.2% had fathers whose attitudes were also protective (Table 1).

Table 2 shows the mean scores obtained by the nursing students on the BHS, MSPSS, CSS and STAXI. The highest mean scores obtained by the students were 13.64±2.45 on the Orientation toward Non-efficient Religion subscale of the CSS, 23.25±5.74 on the Trait Anger subscale of the STAXI, 4.19±3.86 on the BHS and 65.06±12.02 on the MSPSS. Among the perceived social supports of the nursing students, the subscales with the highest scores were Family Support

(24.13±4.07), Positive Reinterpretation, among the efficient methods for coping with stress (12.66±2.13), Orientation toward Religion, among the non-efficient methods for coping with stress (13.64±2.45) and Trait Anger, on the anger levels subscale (23.25±5.74).

The difference between the mean scores obtained in the area of coping with stress was statistically significant according to gender. Female students used emotional support and religion in coping with stress more than the male students did. In contrast, male students used denial, alcohol/substance abuse and a humorous approach in coping with stress significantly more than female students did ( $p < 0.05$ ) (Table 3).

The difference between the mean scores obtained in the area of coping with stress was statistically significant according to student-year level. It was observed that second-year students were able to construct better plans in coping with stress, whereas first-year students were at the lowest level among all year levels in terms of being able to construct plans under stressful conditions. Furthermore, second-year students were shown to accept stressful conditions rather than seek a solution, while first-year students had lower levels of acceptance behaviors than those seen in other year levels. It was found that third-year students were able to reveal their feelings about coping with stress at a higher rate and had higher levels of emotional behaviors in problem solving. The

**Table 3.** Score Distribution of the CSS Subgroup of Non-Efficient Coping according to Gender of the Students (n=231)

	Coping with Stress Scale Subgroups of Non-Efficient Coping				
	Seeking social support	Orientation toward religion	Denial	Alcohol/substance use	Humorous approach
Gender					
Female (n=178), (Mean±SD)	11.03±2.30	13.94±2.19	6.80±1.97	4.38±1.21	6.92±2.28
Male (n=53), (Mean±SD)	10.20±3.07	12.62±2.99	7.50±2.55	6.52±3.71	8.03±2.84
t	2.112	3.517	2.126	6.615	2.944
p	0.015	0.032	0.022	0.000	0.020

SD: Standard deviation.

**Table 4.** Score Distributions of the CSS and STAXI Subscales according to Student-Year Level (n=231)

Student year	CSS			STAXI
	Subgroup of efficient coping with stress, planning	Subgroup of non-efficient coping with stress, acceptance	Subgroup of non-efficient coping with stress, focusing on and manifesting emotions	Subgroup of anger expression-in
Year of study (Mean±SD)				
1 <sup>st</sup> year (n=79)	11.64±2.27	9.54±2.63	10.97±2.71	16.50±3.78
2 <sup>nd</sup> year (n=57)	12.71±2.10	10.92±2.20	11.43±2.59	16.42±3.61
3 <sup>rd</sup> year (n=42)	12.42±2.18	10.61±2.57	12.14±2.86	18.40±4.14
4 <sup>th</sup> year (n=53)	12.47±2.01	10.43±2.52	12.13±2.18	18.58±4.92
F	3.240	3.890	2.933	4.613
p	0.02	0.01	0.034	0.004

CSS: Coping with Stress Scale; STAXI: State-Trait Anger Expression Inventory; SD: Standard deviation.

**Table 5.** Score Distributions of the Total Score of MSPSS and STAXI and the Subscale of Family Support according to Age of Students and Perceived Maternal Attitude (n=231)

Characteristics	STAXI	MSPSS Subscale of Family Support	MSPSS total
	Mean±SD	Mean±SD	Mean±SD
Maternal attitude			
Authoritarian (n=26)	26.53±4.95	22.69±5.16	58.07±11.30
Protective (n=157)	23.05±5.48	24.32±3.78	66.05±11.63
Democratic (n=46)	22.28±6.45	24.58±4.11	66.47±12.16
Unconcerned (n=2)	19.00±5.65	18.00±1.41	46.50±9.19
	F=3.841, p=0.01	F=2.976, p=0.032	F=5.368, p=0.001
Age of student			
17–19 (n=65)	22.24±5.44	24.29±3.79	64.66±12.31
20–22 (n=111)	23.54±5.58	24.81±3.35	66.23±11.36
23+ (n=55)	23.87±6.32	22.60±5.22	63.20±12.90
	F=1.474, p=0.231	F=5.703; p=0.004	F=1.225, p=0.296

MSPSS: Multi-Dimensional Scale of Perceived Social Support; STAXI: State-Trait Anger Expression Inventory; SD: Standard deviation.

difference between the mean scores obtained on the STAXI subscale of Anger Expression-in was statistically significant according to student-year level. Fourth-year students were shown to have statistically significant higher scores in Anger Expression-in under stressful conditions compared to those determined in the other year-levels ( $p<0.05$ ) (Table 4).

Table 5 shows the statistically significant difference between the mean scores of the MSPSS subscale of Family Support according to age ( $p<0.05$ ). Students between the ages of 20–22 were observed to perceive higher degrees of

family social support than other age groups, whereas students aged 23 and older had lower degrees of perceived family social support. However, no statistically significant difference was determined between total scores obtained on the MSPSS and STAXI according to the age of students ( $p>0.05$ ). The difference between the total mean scores on the STAXI was statistically significant according to maternal attitudes perceived by the students ( $p<0.05$ ). Under this measurement, it was observed that as the authoritarian attitudes of mothers increased, the scores students obtained on trait anger increased. The difference between the total mean scores

**Table 6.** Mean Scores Obtained by the Students on MSPSS and CSS according to Parents' Educational Levels (n=231)

Characteristics	MSPSS Subscale of significant other	MSPSS Total	CSS Subscale of Positive Reinterpretation
	Mean±SD	Mean±SD	Mean±SD
Mothers' educational level			
Did not complete primary school (n=35)	15.97±7.85	59.08±12.72	12.08±2.18
Primary school (n=157)	20.04±7.47	67.14±11.26	12.90±2.05
High school or higher (n=39)	19.05±6.63	62.07±12.22	12.20±2.28
	F=4.350, p=0.014	F=8.389, p=0.000	F=3.232, p=0.041
Fathers' educational level			
Did not complete primary school (n=8)	12.25±5.84	53.37±9.69	10.50±1.69
Primary school (n=134)	18.79±7.83	65.20±11.82	12.68±2.24
High school or higher (n=89)	20.58±6.72	65.91±12.07	12.77±2.03
	F=5.314, p=0.006	F=4.118, p=0.018	F=4.412, p=0.013

MSPSS: Multi-Dimensional Scale of Perceived Social Support; CSS: Coping with Stress Scale; SD: Standard deviation.

on the MSPSS and its subscale of Family Support was found to be statistically significant according to maternal attitudes perceived by the students ( $p < 0.05$ ). Here, it was observed that as the democratic attitudes of mothers increased, the students' levels of perceived social support and family support increased (Table 5).

Table 6 shows a statistically significant difference between the mean scores obtained by the students on the MSPSS subscale of Significant Others, their MSPSS total score and their mean scores obtained on the CSS subscale of Positive Reinterpretation according to the educational level of the students' mothers ( $p < 0.05$ ). Students whose mothers were primary school graduates were shown to have significantly higher mean scores than those of the other groups. Similarly, a statistically significant difference was found between the mean scores obtained by the students on the MSPSS subscale of Significant Others, the MSPSS total score, and the CSS subscale of Positive Reinterpretation according to the educational level of the students' fathers ( $p < 0.05$ ). Students whose fathers had high/higher education had significantly higher mean scores than those in other groups (Table 6).

Another substantial result from the study was that as the students' scores on the CSS subscale of Efficient Coping ( $r = 0.22$ ) and on the MSPSS ( $r = 0.44$ ) increased in the correlation analysis, their scores on the BHS and the STAXI (anger control) decreased ( $p < 0.01$ ). Additionally, when the students' mean scores in the area of support of family ( $r = 0.33$ ) and friends ( $0.368$ ) on the MSPSS increased, their hopelessness levels decreased ( $p < 0.01$ ), and when their scores on perceived social support increased, their scores on active coping ( $r = 0.19$ ) and planning skills ( $r = 0.187$ ), which are among the efficient methods for coping with stress, increased in a statistically significant way ( $p < 0.01$ ), with a positively strong relationship determined between them.

Lastly, in terms of the other independent variables used in the study, no statistically significant difference was found

between the students' scores on hopelessness, coping with stress, anger control behavior and perceived social support, according to the students' residence, socio-economic level, family type and surviving parents ( $p > 0.05$ ).

## Discussion

The present study has investigated the relationship between the perceived social support of nursing students and their levels of hopelessness and anger and styles of coping with stress. In confirmation of the study's hypothesis, the results have shown that as the scores related to the behavioral ability of students to efficiently cope with stress and perceived social support increase, the scores on hopelessness and anger decrease ( $p < 0.05$ ). This finding indicates the positive effect that adequate skills in efficiently coping with stress and sufficient social support has on decreasing the levels of hopelessness and anger in nursing students.

When evaluating the mean scores obtained by the nursing students on the main scales and their subscales, it was determined that the students had moderate levels of hopelessness, attached importance to family support, among the social support resources, and most frequently used the method of positive reinterpretation, among the options indicating efficient stress coping mechanisms, and the method of orientation towards religion, among the options indicating non-efficient stress coping mechanisms. Social support was found to be mainly derived from the family. The theory of social support points to the preventive effect that family support has on the lives of individuals, in terms of stress and anger, and its importance in sustaining both mental health and physical health.<sup>[25,26]</sup>

The difference between the mean scores on coping with stress was statistically significant according to gender. Female students used emotional support and orientation towards religion in coping with stress more than male students. On the other hand, male students used denial, alcohol/substance

abuse and a humorous approach in coping with stress more than female students. In their study examining the stress levels of nursing students and their methods of coping with stress, Montes-Berges and Augusto (2007) observed that female students used the method of seeking social support to cope with stress more than male students.<sup>[27]</sup> This finding supports the results of the present study.

Fourth-year students in particular had statistically significant higher scores in the area of anger expression-in under stressful conditions than those obtained by the students in other year levels. In the study by Tully (2004), it was determined that final-year students had higher levels of stress than other year students.<sup>[19]</sup> The bleak employment outlook that has characterized the job market in recent years and the accompanying anxieties about the future are thought to be associated with the higher scores of anger expression-in in the fourth-year students who participated in the present study.

The difference between the mean scores on the MSPSS subscale of Family Support was statistically significant according to age. Students aged between 20–22 years perceived a higher degree of family social support than the other age groups, whereas students aged 23 and older perceived a lower degree of family social support. This result suggests that students aged 23 and older rely more heavily on environmental support and support from friends during the early stages of their developmental period, at the time when they leave their parents and become independent. These results are compatible with the findings in the literature.<sup>[28]</sup>

The study showed that with the increase in the democratic attitudes of the students' mothers, the students' levels of perceived social support and family support increased; in contrast, with the increase in the authoritarian attitudes of the students' mothers, the students' scores on trait anger increased. Akal (2010) reported that it was important for young people to feel that they are in a positive and supporting environment, as this will help them to be more self-controlled, have greater self-esteem and self-confidence and eliminate the negative effects of anger.<sup>[26]</sup> In the same study, it was found that as the university students' perceived social support from their families increased, the frequency of their expressions of anger decreased. These study finding are supported by the results of the present study.

It was observed that as the socio-economic level of families increased, the students' sense of hopelessness decreased, but to a statistically insignificant degree. In the study conducted by Çelikel and Erkorkmaz (2008) examining the factors related to the hopelessness levels of university students, they found that university students who struggled to afford the cost of their education, due to being at the lower end of

the socio-economic scale, had higher levels of hopelessness.<sup>[29]</sup> These findings support the results of the present study.

Finally, when the mean scores that were obtained by the students whose fathers had high/higher levels of education were high on the MSPSS subscale of Significant Others, the MSPSS total score and the CSS subscale of Positive Reinterpretation score were significantly higher than those of other groups (Table 6). Related studies<sup>[30,31]</sup> also reported that students whose fathers had high/higher levels of education had higher mean scores on the aforementioned variables. These findings suggest that high educational levels may result in parents adopting a democratic and supportive attitude toward their children and contributing to the provision of more social support, in addition to increasing students' self-esteem and self-confidence, enabling them to cope with stress more efficiently. Furthermore, in the present study, the students whose mothers were primary school graduates had significantly higher mean scores than those determined in the other groups (all measurements) (Table 6), the result of which was associated with the study's higher number of mothers who were primary school graduates. The higher mean scores were even more pronounced when the students' mothers had high/higher education levels (Table 6).

### Study Limitations

Since the study was conducted with nursing students studying at a health vocational school of only one university, the results are unable to be generalized beyond that of the study sample alone.

### Conclusion and Suggestions

According to the study results, it is recommended that;

- Learning environments capable of providing more efficient methods of coping with stress and managing anger be established for university-level nursing students,
- The study be implemented in different and larger sample groups using experimental methods, taking into consideration the fact that a number of variables and cultural factors impact nursing students' level of ability to cope with stress, their perception of social support, their ability to exercise anger control and their sense of hopelessness,
- Qualitative studies be conducted to determine the reasons attributed to why nursing students primarily prefer non-efficient approaches to coping with stress and anger expression-in behaviors as they advance in their years of study.

When a society protects and promotes the health of their youth and provides them with sufficient support resources, the result will be a healthier society in the future. By support-

ing nursing students socially, economically and culturally to achieve this goal, their biopsychosocial health will improve. Nursing students who benefit from a high quality of life during their youth and undergo a quality educational process will become healthier and more successful and productive in their professional life and thereby be able to constructively contribute to the betterment of society.

## References

- Basut E. Stres, başa çıkma ve ergenlik. *Çocuk ve Ergen Ruh Sağlığı Dergisi* 2006;13:31-6.
- Razı G, Kuzu A, Yıldırı A, Ocaklı A, Arifoğlu BÇ. Çalışan gençlerde benlik saygısı, iletişim becerileri ve stresle baş etme. *TAF Preventive Medicine Bulletin* 2009;8:17-26.
- Pulido M, Augusto JM, Lopez E. Sources of stress in nursing students: a systematic review of quantitative studies. *International Nursing Review* 2012;59:15-25.
- Altıok HÖ, Üstün B. Hemşirelik öğrencilerinin stres kaynakları. *Kuram ve Uygulamada Eğitim Bilimleri* 2013;13:747-66.
- Sheu S, Lin HS, Hwang SL. Perceived stress and physio-psycho-social status of nursing students during their initial period of clinical practice: the effect of coping behaviors. *Int J Nurs Stud* 2002;39:165-75.
- Edwards D, Burnard P, Bennett K, Hebden U. A longitudinal study of stress and self-esteem in student nurses. *Nurse Educ Today* 2010;30:78-84.
- Maville JA, Kranz PL, Tucker BA. Perceived stress reported by nurse practitioner students. *J Am Acad Nurse Pract* 2004;16:257-62.
- Luo Y, Wang H. Correlation research on psychological health impact on nursing students against stres, coping way and Social support. *Nurse Education Today* 2009;39:5-9.
- Kartal A, Çetinkaya B. Yüksekökol öğrencilerinin algılanan sosyal destek durumları ve sosyal desteği etkileyen faktörler. *Fırat Sağlık Hizmetleri Dergisi* 2009;4:3-20.
- Temel E, Bahar A, Çuhadar D. Öğrenci hemşirelerin stresle baş etme tarzları ve depresyon düzeylerinin belirlenmesi. *Fırat Sağlık Hizmetleri Dergisi* 2007;2:107-14
- Yıldırım İ. Algılanan Sosyal Destek Ölçeği'nin geliştirilmesi güvenilirliği ve geçerliği. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi* 1997;13:81-7.
- Aksaray G, Kaptanoğlu C, Oflu S. Koruyucu ruh sağlığı. *Yeni Symposium* 1999;37:55-9.
- Arkar H, Sarı Ö, Fidaner H. Relationships between quality of life, perceived social support, social network and loneliness in a Turkish sample. *Yeni Symposium* 2004;42:20-7.
- Dökmen Z. Yakınlarına bakım verenlerin ruh sağlıkları ile sosyal destek algıları arasındaki ilişkiler. *Ankara Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 2012;3:3-38.
- Reeve KL, Shumaker CJ, Yearwood EL, Crowell NA, et al. Perceived stress and social support in undergraduate nursing students' educational experiences. *Nurse Educ Today* 2013;33:419-24.
- Güngörmüş K, Okanlı A, Kocabeyoğlu T. Factors Influencing Resilience in Nursing Students. *Psikiyatri Hemşireliği Dergisi* 2016;6:9-14.
- Yamaç Ö. Üniversite öğrencilerinin algıladıkları sosyal destek ile stresle başa çıkma stilleri arasındaki ilişki. [Yayınlanmamış Doktora Tezi] Konya: Selçuk Üniversitesi Sosyal Bilimler Enstitüsü; 2009.
- Zimet GD, Dohlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. *Journal of Personality Assessment* 1988;52:30-41.
- Tully A. Stress, sources of stress and ways of coping among psychiatric nursing students. *J Psychiatr Ment Health Nurs* 2004;11:43-7.
- Beck AT, Weissman A, Lester D, Trexler L. The measurement of pessimism: the hopelessness scale. *J Consult Clin Psychol* 1974;42:861-5.
- Seber G, Dilbaz N, Kaptanoğlu C, Tekin D. Umutsuzluk ölçeği: geçerlilik ve güvenilirliği. *Kriz Dergisi* 1993;1:139-42.
- Eker D, Arkar H, Yıldız H. Factorial Structure, Validity, and Reliability of Revised Form of the Multidimensional Scale of Perceived Social Support. *Türk Psikiyatri Dergisi* 2001;12:17-25.
- Carver CS, Scheier MF, Weintraub JK. Assessing coping strategies: a theoretically based approach. *J Pers Soc Psychol* 1989;56:267-83.
- Gök Ş. Anksiyete ve depresyonda stresle başa çıkma. [Yayınlanmamış Uzmanlık Tezi] İstanbul: İstanbul Üniversitesi Psikiyatri Anabilim Dalı; 1995.
- Özer K. Sürekli öfke ve öfke ifade tarzı ölçekleri ön çalışması. *Türk Psikoloji Dergisi* 1994;9:26-35.
- Akal A. Üniversite öğrencilerinde algılanan sosyal destek ile öfke ifade biçimleri arasındaki ilişkinin incelenmesi. [Yayınlanmamış Yüksek Lisans Tezi] İstanbul: Maltepe Üniversitesi Sosyal Bilimler Enstitüsü; 2010.
- Montes-Berges B, Augusto JM. Exploring the relationship between perceived emotional intelligence, coping, social support and mental health in nursing students. *J Psychiatr Ment Health Nurs* 2007;14:163-71.
- Şenol S, İşeri E, Şener Ş. Ruhsal ve Fiziksel Gelişim, İçinde: Ruhsal Hastalıklar, (Ed): Yüksel, N., 3. Basım, Medikal & Nobel, Ankara, 2006.
- Çelikel F, Erkorkmaz Ü. Factors related to depressive symptoms and hopelessness among university students. *Nöropsikiyatri Arşivi* 2008;45:122-9.
- Yılmazel G. Perceived Social Support and Health Related Behaviors at the School of Health Students. *Yeni Symposium Journal* 2013;51:151-7.
- Ersun A, Köze B, Muslu G, Beytut D, et al. Investigation of The Relation Between The Use of Internet Among Nursing Students and Social Support Systems. *İ.Ü.F.N. Hemşirelik Dergisi* 2012;20:86-92.