

Research Article

Determination of Nursing Students' Resilience Levels, Care Behaviors, and Violence Management Competencies: A Descriptive, Cross-Sectional, and Relational Study

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Purpose. Violence is a factor that is frequently encountered in health systems and causes problems of various sizes. Nursing students who take an active role in health environments and are also inexperienced are also exposed to this workplace violence. Mental health nurses and nursing students practicing in this field aim to improve the quality of patient care while managing violence and aggression. It is thought that the inability of nursing students practicing in the field of mental health to successfully manage violence and demonstrate resilience may affect their clinical performance and reduce the quality of patient care. This study was conducted to determine the psychological resilience levels, caring behaviors, and violence management competencies of nursing students and to reveal the relationship between the variables. **Design and Methods.** The type of study is descriptive and cross-sectional. The sample of the study consisted of 452 nursing students who agreed to participate in the study. The data of the study were collected using the personal information form, Adult Resilience Scale, Caring Behaviors Scale-24, and Violence Management Competency Scale for nursing students in practice areas. This study was reported following the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) recommendations. **Findings.** A statistically significant positive correlation was found among the psychological resilience levels, caring behaviors, and violence management proficiency of the students participating in the study ($p = 0.001$). **Practice Implications.** It is very important to determine the psychological resilience, care behaviors, and violence management competency levels of nursing students, who are the professionals of the future, to present nursing care from a holistic framework and to increase the quality of the care provided. In this context, it is recommended to determine the psychological resilience, care behaviors, and violence management competency levels of nursing students in their education and training processes.

1. Introduction

Individuals face many stressful situations and traumas throughout their lives [1, 2]. These stresses and traumas they encounter affect many areas of their lives, such as their private lives and school and work performance, and also disrupt their life balance. Traumatic experiences create intense negative emotions such as fear, helplessness, insecurity, anxiety, guilt, anger, timidity, and worthlessness in the individual. However, as a result of research studies, it has been stated that 5%–35% of people

succumb to this negative situation in cases of stress and trauma [3, 4].

Nursing students face many stress factors that affect their academic success and quality of life from the beginning of their educational experience [5–7]. In the COVID-19 pandemic process, which has affected the whole world and our country, the limitations of the application areas in the education process, the uncertainties regarding graduation, the fear of losing due to COVID-19, and the long-term and uncontrollable stress experienced negatively affect their professional identities and health status. It is widely accepted

that students lose their academic achievement by weakening of their thinking and decision-making skills [5, 8–10].

Nursing students' exposure to long-term and uncontrollable stress negatively affects their professional identities and health status [5, 8]. It has been shown in studies that it causes them to experience high-risk situations in terms of health [11]. These effects are directly related to the adequacy of individual coping behaviors [12]. The effective use of coping strategies and high psychological resilience protect health [13]. Students need to develop effective coping behaviors to cope with stress and to keep their psychological resilience high, as it will enable them to benefit from their education most appropriately, as well as to create a positive professional identity [5].

Individuals with high psychological resilience see the trauma they experience as an opportunity for their development, get rid of distress, and focus on positive change, relaxation, and psychological development [14, 15]. The level of psychological resilience is a personal characteristic that protects individuals who are faced with negativities and stressors [16]. Psychological resilience is seen as the process of adapting to important sources of stress such as serious health problems, trauma or familial and relational problems, and violence [17]. If the person is psychologically resilient, he will continue to develop by the characteristics of his developmental period, fulfill the duties expected of him, maintain his relationships healthily, and be a successful individual both in his school life and in his private life. It is important for nursing students, who are an important part of the health team and future health professionals, to build, learn, and develop their psychological resilience, both for their health and the health of the group they care for [18].

The concept of nursing and care are inseparable parts of a whole that has an academic and historical relationship [19]. The concept of care, which is defined by all nursing theorists, constitutes the essence of the nursing profession [20] and represents all the practices in health services that nurses provide to patients [21]. It is internationally accepted that the concept of care is the basis of a good and effective nurse-patient relationship [22]. The quality of care provided by nurses greatly contributes to the health care quality of the institution [23, 24].

Violence is violence against a person or a group. It is the use of force that results in physical, sexual, or psychological harm. However, in recent years, it has been observed that workplace violence includes psychological violence as well as physical violence [25]. Psychological violence is a constant attack on victims' self-confidence and self-esteem [26]. It includes meanings that express behaviors such as all kinds of maltreatment, threats, violence, and humiliation systematically applied to individuals by their superiors, equal-level employees, or subordinates [27]. The violence that nurses encounter in the workplace originates from patients, relatives, physicians, and fellow nurses [28–30]. Violence committed by nurses against nurses is quite common. While the violence seen between nurses at similar levels in a hierarchical system is called horizontal or lateral violence, the violence committed by nurses in higher positions against those in lower positions is called vertical violence [30].

Psychiatric nurses, as the healthcare professionals who are in most frequent contact with their clients, may be the most frequent victims of patients' aggression. Violent behaviors exhibited by psychiatric patients can include verbal abuse, physical threats or assault, and sexual harassment, all of which harm the victim both psychologically and physically [31]. Although medications are effective in controlling psychiatric symptoms and therefore reducing aggression, it takes time for the medication to work. Therefore, aggression is common in the acute psychiatric healthcare setting. Liu et al. [32] reported in their study that 84.2% of the mental health nurses were attacked by their patients. Workplace violence has also been found to be a major cause of occupational stress among mental health nurses [33]. Hasan and Tumah [34] reported in their study that there may be moderate to high levels of occupational stress among mental health nurses due to their job characteristics.

Violence in health, which has increased in recent years, reduces the motivation of nurses and negatively affects the quality of care [35]. Violence in the field of health is an important public health problem that negatively affects the physical and mental health of individuals [36–38]. Among healthcare professionals, nursing students are more exposed to violence due to their young age, insufficient clinical experience, and difficulty in communicating quickly with patients and nurses due to frequent rotations in clinics [38–40]. When the studies conducted in Turkey were examined, it was found that nurse students were more exposed to verbal violence in the field of practice [41, 42]. Clinical violence has negative effects on nursing students, and it is noteworthy that verbal abuse has more negative effects on clinical performance and emotions than physical violence. Violence against nursing students not only causes psychological harm but also affects their clinical performance and reduces the quality of patient care [39]. However, the thought and behavior of leaving the profession may develop more in nursing students who are victims of violence, and as a result, leaving the profession may be the cause of nurse inadequacy in the future [43, 44].

It was determined that the anxiety levels of nursing students who were exposed to violence increased, and in parallel, the duration of absenteeism increased in clinical practice processes [45]. In addition to its physical and psychological negative effects on nursing students, violence also negatively affects students' perspectives, professional attitudes, and roles. Violence also reduces the job satisfaction of nursing students, negatively affects the quality of education and patient care standards, and impairs students' communication skills with patients and other health professionals [44, 46]. For this reason, it is important to determine the violence management competency status of nursing students.

In the literature, no study has been found that examines the psychological resilience level, care behaviors, and violence proficiency status of nursing students together. In this context, this study is unique. This study aims to determine the psychological resilience levels, care behaviors, and violence management competencies of nursing students.

2. Methods

2.1. Participants and Setting. The population of the research consisted of 71,538 nursing students who received undergraduate education in Turkey. The sample size of the study was determined as at least 382 nursing students with the known universe sample calculation formula [19]. The research was carried out with 454 nursing students in Turkey in August 2022. Nursing students who accepted to participate in the study and filled out the forms formed the sample of the study. The purpose and nature of this study were explained to the participants, they were invited to participate in the research, and then the forms were applied. The data of the research were collected via WhatsApp and prepared in Google Forms.

2.2. Data Collection. To collect the data for the study, the personal information form, the Psychological Resilience Scale for Adults, the Care Behaviors Scale-24, and the Violence Management Competency Scale for nursing students were used in the study. The personal information form was prepared by the researchers in line with the current literature. The Adult Resilience Scale, Caring Behaviors Scale-24, and Violence Proficiency Scale are reliable measurement tools that have been validated and are reliable in the Turkish society. By applying the aim of the article, the measurement of nursing students has safely measured the targeted parameters, and its use and intelligibility are at a good level. This study was reported following the STROBE recommendations.

2.2.1. Personal Information Form. The personal information form was prepared by the researchers on the literature [47–49], and this form consists of a total of ten questions including questions about the age, gender, class, marital status, economic level, place of residence, and situations of experiencing violence of students.

2.2.2. Resilience Scale for Adults (RSAs). RSA, which was developed by Friborg et al. [50], was translated into Turkish by Basim and Cetin [17] and its validity and reliability were established. The evaluation of scale items was released as in the original study. To get rid of the acquaintance bias, the five boxes opposite the answers are evaluated in a five-point Likert format and the desired evaluation is made. If it is desired to increase psychological resilience as the scores increase, the answer boxes should be evaluated as 1, 2, 3, 4, and 5 from left to right. If this opinion is taken into account, in the scale, questions 1, 3, 4, 8, 11, 12, 13, 14, 15, 16, 23, 24, 25, 27, 31, and 33 are reverse questions. The total Cronbach alpha coefficient of the original scale is 0.86.

2.2.3. Care Behaviors Scale-24. Caring Behaviors Scale-42 (CBS-42) was developed by Wolf et al. [51]. It was designed by the patient and the nurse in 1994 to evaluate the nursing care process bilaterally. In 2006, Wu et al. transformed it into the Caring Behaviors Scale-24 (CBS-24) as the short form of BDS

42 [52]. The Turkish validity and reliability study of the Caring Behaviors Scale-24 (CBS-24) form was conducted by Kursun and Kanan [53] in 2010, and the Cronbach alpha value was found to be 0.97 in patients and 0.96 in nurses. The scale consists of the following 4 subgroups: assurance, knowledge skills, respect, and commitment. 8 items (16, 17, 18, 20, 21, 22, 23, and 24) for the assurance subdimension, 5 items for the knowledge-skills subdimension (9, 10, 11, 12, and 15.), a total of 24 items for the respect subdimension, 6 of which are for the subdimension of beingness (1, 3, 5, 6, 13, and 19), and 5 for the subdimension of commitment (items 2, 4, 7, 8, and 14). A 6-point Likert-type scale (1: never, 2: rarely, 3: sometimes, 4: usually, 5: often, and 6: always) is used for each item of the scale. Scoring of the scale is done by summing the scores corresponding to the answers given and calculating the arithmetic mean. In this way, in addition to obtaining a single score from the scale, subdimension scores are also obtained. The increase in the total score of the scale and the scores obtained from the subdimensions indicates that the level of perception of the quality of care of the patients or nurses increases.

2.2.4. Violence Management Proficiency Scale in Application Areas for Nursing Students. It was developed by Lu et al. [54] and consists of 28 items. Turkish validity and reliability of the scale was performed by Karabey et al. [55]; the Cronbach α value was found to be 0.96. The scale items are 5-point Likert-type, i.e., (1) strongly disagree, (2) disagree, (3) undecided, (4) agree, and (5) strongly agree. The total score of the scale consists of the sum of the items scored according to the answers given by the nursing students in line with the abovementioned scoring. The minimum score that can be obtained from the scale is 28, and the maximum score is 140.

2.3. Data Analysis. The data obtained from the study were evaluated using SPSS.25 statistical package program. Frequency and percentage were used in the analysis of socio-demographic data. The normality of the data was checked using the Kolmogorov–Smirnov test. When comparing data that fit normally distributed, the independent sample *t*-test for two independent groups and the *F*-test (ANOVA) for more than two groups were analyzed. He used Spearman correlation analysis to examine the relationship between variables. The significance level was taken as $p < 0.05$.

2.4. Ethical Considerations. Written permission was obtained from the noninterventional clinical research Ethics Committee (2022/10-35) before starting the study. The students participating in the study were informed about the purpose of the study and their consent was obtained. The study was conducted by the principles of the Declaration of Helsinki.

2.4.1. Research Questions

- (1) What are the resilience levels of nursing students?
- (2) What is the violence management competence of nursing students?

- (3) What is the level of nursing students' care behaviors?
 (4) Is there a relationship among nursing students' resilience sensitivity levels, violence management proficiency, and care behaviors?

3. Results

The distribution of nursing students according to some introductory characteristics is given in Table 1. It was determined that 74.4% of the students participating in the study were women, 95.8% were between the ages of 18–23, 54.4% had an income equal to their expenses, and 67.8% stayed in the dormitory. Again, it was found that 11.46% of the students were exposed to violence, 86.5% of the students who were exposed to violence were exposed to sexual violence, and 42.3% of the students were found to stay away from the violence to cope with it.

Table 2 shows the distribution of nursing students' total score averages and subdimension mean scores of the Resilience Scale, Caring Behaviors Scale, and Violence Management Proficiency Scale. It was determined that the mean score of the students on the psychological Resilience Scale was 100.18 ± 13.04 , the total mean score on the Caring Behaviors Scale was 5.15 ± 0.67 , and the total mean score on the Violence Management Efficiency Scale was 108.83 ± 16.31 .

In Table 3, some introductory characteristics of the students included in the study and the total and subdimension mean scores of the Resilience Scale are presented. The self-perception subdimension of the students aged 18–23 who participated in the study was 19.25 ± 3.35 ($p = 0.001$), the family reconciliation subdimension score average was 18.52 ± 4.50 ($p = 0.001$), and the social resources subdimension average was 19.16 ± 4.54 ($p = 0.002$). The mean score of the structural style subdimension of the students whose income is more than their expenses was found to be 10.19 ± 3.27 ($p = 0.005$), and the mean score of the social proficiency subdimension was 20.42 ± 2.54 ($p = 0.002$). The future perception subdimension mean score of the students living with their friends at home was 15.12 ± 1.88 ($p = 0.003$), and the structural style subdimension mean score was 10.05 ± 3.91 ($p = 0.004$).

Table 4 shows some introductory characteristics of nursing students and the total score and subdimension mean scores of the Caring Behaviors Scale. There was no statistically significant correlation between students' descriptive characteristics and their Caring Behaviors Scale scores.

According to the descriptive characteristics of the students participating in the study in Table 5, the Violence Management Adequacy Scale's total score and subdimension mean score are given. The mean postevent recovery subdimension score of male nursing students was found to be 40.44 ± 6.98 ($p = 0.003$). The violence response and interaction subdimension mean score of the students living with their friends at home was 12.43 ± 2.03 ($p = 0.004$), and the Violence Management Proficiency Scale mean score was 115.56 ± 6.33 ($p = 0.002$).

Table 6 presents the relationship between the psychological resilience care behaviors and violence management proficiency of the students included in the study. There was a positive and moderate relationship ($r = 0.399$, $p = 0.001$)

TABLE 1: Distribution of nursing students by some descriptive characteristics.

Sociodemographic characteristics	<i>n</i>	%
Gender		
Female	338	74.40
Male	116	25.60
Age		
18–23	435	95.80
24–28	19	4.20
Grade		
1st-grade student	79	17.40
2nd-grade student	125	27.50
3rd-grade student	121	26.70
4th-grade student	129	28.40
Marital status		
Married	6	98.70
Single	448	1.30
Economical situation		
Income less than expenses	171	37.70
Income and expenses equal	246	54.20
Income more than expenses	37	8.10
Place of residence		
In dormitory	308	67.80
At home with friends	16	3.50
At home with family	122	26.90
Alone	8	1.80
The state of being exposed to violence		
Yes	52	11.46
Physical violence	1	1.90
Psychological/verbal violence	1	1.90
Sexual violence	45	86.50
Economic violence	5	9.60
No	402	88.54
To deal with violence		
Do nothing	13	25.00
Friend support	7	13.46
Support from managers	10	19.24
Go away	22	42.30

between the students' Resilience Scale and the Violence Management Adequacy Scale and a positive and weak relationship between the Caring Behaviors Scale and the Resilience Scale ($r = 0.255$, $p < 0.05$). When the relationship between violence management proficiency and care behaviors is examined, it can be said that there is a positive, moderate, and significant relationship ($r = 0.514$, $p < 0.05$).

4. Discussion

In this study, which was carried out to determine the resilience levels, care behaviors, and violence management competencies of nursing students, a significant relationship was found among the psychological resilience levels, care behaviors, and violence management competencies of the students, and our findings were discussed with the relevant literature.

Resilience refers to the ability to adapt successfully to difficulties, traumas, or other major stressors [56]. Nursing students are faced with an intensely stressful physical and psychological environment, the difficulties of acute patient care, and the fear of making mistakes [57, 58].

TABLE 2: Distribution of the mean scores of the Resilience Scale, the Caring Behaviors Scale, and the Violence Management Efficiency Scale.

	$\bar{X} \pm SS$	Min.	Max.
<i>Resilience Scale</i>			
Self-perception	19.22 ± 3.17	9.00	30.00
Future perception	14.23 ± 1.99	4.00	20.00
Structural style	9.52 ± 1.44	4.00	20.00
Social competence	19.81 ± 2.85	1.00	28.00
Family reconciliation	18.27 ± 3.09	9.00	30.00
Social resources	19.12 ± 4.52	7.00	35.00
Resilience Scale's total score	100.18 ± 13.04	60.00	163.00
<i>Caring Behaviors Scale</i>			
Assurance	5.19 ± 0.71	3.00	6.00
Knowledge skill	5.04 ± 0.78	2.40	6.00
Respectful	5.22 ± 0.68	2.50	6.00
Loyalty	5.13 ± 0.72	2.80	6.00
Caring Behaviors Scale's total score	5.15 ± 0.67	2.92	6.00
<i>Violence Management Proficiency Scale</i>			
Postevent recovery	40.32 ± 6.02	10.00	50.00
Violence information management	33.66 ± 5.95	9.00	45.00
Violence response and interaction	23.67 ± 3.74	6.00	30.00
Response to violence	11.25 ± 2.32	3.00	15.00
Violence Management Proficiency Scale's total	108.83 ± 16.31	28.00	140.00

Again, nursing students experience some difficulties in balancing their academically competitive and stressful learning environments and social lives [59–62]. In this study, it was determined that the psychological resilience levels of nursing students were moderate (Table 2). When the literature was examined, Rios-Risquez et al. [63] reported that the psychological resilience levels of nursing students were moderate in their study to determine the relationship between resilience, academic burnout, and psychological health in nursing students. Again, Smith and Yang [64] found that the psychological resilience levels of nursing students were moderate in their study to determine the stress, resilience, and psychological wellbeing of Chinese undergraduate nursing students. Ozsaban et al., (2017) conducted a study to evaluate nurses' psychological resilience, academic stress and current social support levels and found that students' individual characteristics affected their psychological resilience. Pinar et al. [66] conducted a study to examine the resilience, self-confidence, and problem-solving skills of midwife candidates, and it was found that students between the ages of 17–21 had higher levels of psychological resilience than students between the ages of 22–26. Again, in our study, it was found that students whose income level is higher than their expenditure level had higher scores on the structural style and social proficiency subdimensions of the psychological resilience scale (Table 3). When the literature was examined, Guo et al. [67] reported that the psychological resilience levels of nurses with high-income levels were also high in their study to determine the psychological resilience levels of Chinese nurses. Again, Ozsaban et al. [65] reported that social resource subdimension score averages were lower in those with less income than their expenses compared to other groups. In this study, it was determined that nursing students living at home with their friends had statistically higher scores on the future perception and structural style

subdimensions of the Resilience Scale (Table 3). It is thought that living together with their friends creates social support for students and nursing students are strengthened psychologically, and they increase their psychological resilience levels by noticing their deficiencies and strengths. Awareness should be raised and appropriate initiatives should be taken to increase psychological resilience in nursing students, which is a personal trait that can be learned and developed.

The concept of care, which is at the core of the nursing profession and is indispensable for the profession, is among the basic functions of the nurse to increase the health and wellbeing of individuals and improve health [68, 69]. It is possible to develop the care behaviors that form the heart and soul of the nursing profession through education and training processes [70]. When the literature was examined, Karabey et al. [55] determined that nursing students' care behaviors were at a high level in their study conducted to reflect the violent tendencies of nursing students in their care behaviors. Türk et al. [71] reported that students' care behavior scores were high in their study conducted to determine the reasons for choosing a profession and the perception of care behaviors of nursing students. Again, Gul and Arslan [72], in their study to determine nursing students' care behaviors, found that students' care behaviors were at a high level. The high level of care behaviors that constitute the cornerstone of nursing in nursing students is thought to be pleasing in terms of the development of the nursing profession.

Nursing students are more exposed to workplace violence due to their younger age, insufficient clinical experience, frequent rotations in clinical practice, and difficulty in communicating with patients and nurses compared to healthcare professionals [39, 40]. At this point, nursing students need to gain and develop their violence management competencies in healthcare settings. It was determined

TABLE 3: Resilience scores of nursing students according to some descriptive characteristics.

Variable $n = 454$	Resilience Scale subdimension score averages				Resilience Scale total score $\bar{x} \pm s.s$
	Self-perception $\bar{x} \pm s.s$	Future perception $\bar{x} \pm s.s$	Structural style $\bar{x} \pm s.s$	Social competence $\bar{x} \pm s.s$	
<i>Gender</i>					
Female	19.36 ± 3.00	14.20 ± 1.94	9.43 ± 3.33	19.91 ± 2.76	18.33 ± 2.99
Male	18.82 ± 3.60	14.31 ± 2.16	9.78 ± 3.73	19.50 ± 3.09	18.08 ± 3.35
Test statistics	$t = 1.571$ $p = 0.119$	$t = -0.493$ $p = 0.061$	$t = -0.943$ $p = 0.172$	$t = 1.330$ $p = 0.113$	$t = 0.746$ $p = 0.283$
<i>Age</i>					
18-23	19.25 ± 3.35	14.23 ± 1.94	9.55 ± 2.41	19.87 ± 2.85	18.52 ± 4.50
24-28	18.57 ± 5.36	14.15 ± 3.11	8.78 ± 2.00	18.42 ± 2.69	18.25 ± 3.02
Test statistics	$t = 0.908$ $p = 0.001^*$	$t = 0.163$ $p = 0.034$	$t = 0.950$ $p = 0.351$	$t = 2.178$ $p = 0.823$	$t = 0.368$ $p = 0.001^*$
<i>Grade</i>					
1st-grade student	19.69 ± 3.78	14.43 ± 2.12	9.94 ± 3.90	3.31 ± 0.37	18.72 ± 3.85
2nd-grade student	18.85 ± 2.78	14.12 ± 1.83	9.58 ± 3.13	2.46 ± 0.22	18.04 ± 2.68
3rd-grade student	19.30 ± 3.15	14.33 ± 1.94	9.47 ± 3.30	2.72 ± 0.24	18.34 ± 2.86
4th-grade student	19.22 ± 3.13	14.10 ± 2.12	9.25 ± 3.56	2.98 ± 0.26	18.14 ± 3.13
Test statistics	$F = 1.169$ $p = 0.321$	$F = 0.650$ $p = 0.583$	$F = 0.684$ $p = 0.562$	$F = 2.367$ $p = 0.070$	$F = 0.885$ $p = 0.449$
<i>Marital status</i>					
Married	19.21 ± 3.17	14.22 ± 2.00	9.55 ± 1.14	19.80 ± 2.85	18.26 ± 3.05
Single	20.16 ± 3.66	14.33 ± 2.86	7.33 ± 1.46	20.50 ± 3.01	19.00 ± 3.29
Test statistics	$t = -0.729$ $p = 0.383$	$t = -0.126$ $p = 0.831$	$t = 1.572$ $p = 0.132$	$t = -0.593$ $p = 0.759$	$t = -0.581$ $p = 0.042$
<i>Economical situation</i>					
Income less than expenses	18.88 ± 3.24	14.56 ± 2.94	9.16 ± 4.44	19.24 ± 3.38	18.51 ± 4.64
Income and expenses equal	19.28 ± 2.89	14.21 ± 1.90	9.10 ± 3.32	19.47 ± 2.91	18.07 ± 2.76
Income more than expenses	20.43 ± 4.22	14.17 ± 1.88	10.19 ± 3.27	20.42 ± 2.54	18.49 ± 3.11
Test statistics	$F = 3.711$ $p = 0.025$	$F = 0.593$ $p = 0.553$	$F = 5.372$ $p = 0.005^*$	$F = 6.474$ $p = 0.002^*$	$F = 1.055$ $p = 0.349$
<i>Place of residence</i>					
In dormitory	19.38 ± 3.13	14.32 ± 1.91	9.42 ± 3.19	19.79 ± 2.72	18.31 ± 2.92
At home with a friend	19.50 ± 3.92	15.12 ± 1.88	10.05 ± 3.91	18.37 ± 2.82	17.06 ± 2.90
At home with family	18.94 ± 3.26	13.90 ± 2.23	6.12 ± 2.29	20.08 ± 3.11	18.40 ± 3.43
Alone	18.12 ± 2.84	14.43 ± 1.59	9.06 ± 3.71	18.75 ± 3.13	17.00 ± 4.07
Test statistics	$F = 1.259$ $p = 0.288$	$F = 1.876$ $p = 0.003^*$	$F = 3.836$ $p = 0.004^*$	$F = 1.785$ $p = 0.149$	$F = 1.363$ $p = 0.253$
<i>The state of being exposed to violence</i>					
Yes	19.62 ± 3.88	14.60 ± 1.40	10.04 ± 3.74	20.26 ± 3.03	19.12 ± 3.83
No	19.17 ± 3.08	14.18 ± 1.19	9.46 ± 3.40	19.75 ± 2.83	18.16 ± 2.97
Test statistics	$t = 0.084$ $p = 0.927$	$t = 1.384$ $p = 0.388$	$t = 1.123$ $p = 0.761$	$t = 1.174$ $p = 0.534$	$t = 2.067$ $p = 0.055$
Social resources					
19.05 ± 4.33					19.16 ± 4.54
19.30 ± 5.05					18.15 ± 4.06
$t = -0.498$					$t = 0.935$
$p = 0.135$					$p = 0.002^*$
Family reconciliation					
18.33 ± 2.99					18.52 ± 4.50
18.08 ± 3.35					18.25 ± 3.02
$t = 0.746$					$t = 0.368$
$p = 0.283$					$p = 0.001^*$
Social competence					
19.91 ± 2.76					19.16 ± 4.54
19.50 ± 3.09					18.15 ± 4.06
$t = 1.330$					$t = 0.935$
$p = 0.113$					$p = 0.002^*$
Structural style					
9.43 ± 3.33					19.15 ± 3.85
9.78 ± 3.73					19.21 ± 2.68
$t = -0.943$					19.34 ± 2.86
$p = 0.172$					18.79 ± 3.13
Future perception					$F = 0.337$
14.20 ± 1.94					$p = 0.799$
14.31 ± 2.16					
$t = -0.493$					19.13 ± 3.37
$p = 0.061$					17.83 ± 4.54
Self-perception					$t = 0.701$
19.36 ± 3.00					$p = 0.207$
18.82 ± 3.60					
$t = 1.571$					101.32 ± 13.79
$p = 0.119$					98.97 ± 12.01
Future perception					101.69 ± 12.08
14.20 ± 1.94					$F = 2.353$
14.31 ± 2.16					$p = 0.096$
$t = -0.493$					
$p = 0.061$					19.22 ± 4.54
Structural style					19.12 ± 3.83
9.43 ± 3.33					19.74 ± 5.05
9.78 ± 3.73					19.04 ± 4.45
$t = -0.943$					$t = 1.025$
$p = 0.172$					$p = 0.227$
Future perception					
14.20 ± 1.94					103.38 ± 15.85
14.31 ± 2.16					99.79 ± 12.61
$t = -0.493$					$t = 1.840$
$p = 0.061$					$p = 0.091$

TABLE 3: Continued.

Variable <i>n</i> = 454	Resilience Scale subdimension score averages						Resilience Scale total score $\bar{x} \pm s.s$
	Self-perception $\bar{x} \pm s.s$	Future perception $\bar{x} \pm s.s$	Structural style $\bar{x} \pm s.s$	Social competence $\bar{x} \pm s.s$	Family reconciliation	Social resources	
<i>To deal with violence</i>							
Do nothing	20.61 ± 4.05	15.30 ± 2.75	11.38 ± 4.33	21.23 ± 2.71	19.61 ± 4.78	21.23 ± 6.74	109.38 ± 11.12
Friend support	20.00 ± 2.12	14.80 ± 0.83	10.80 ± 0.83	21.60 ± 2.30	21.00 ± 4.52	20.60 ± 4.03	108.80 ± 11.23
Support from managers	18.90 ± 4.20	14.20 ± 1.75	8.50 ± 3.30	19.60 ± 2.59	18.40 ± 3.09	19.20 ± 4.34	98.80 ± 11.60
Go away	19.36 ± 3.99	14.13 ± 2.81	10.59 ± 3.99	19.86 ± 3.31	19.22 ± 3.80	19.31 ± 4.97	102.50 ± 16.19
Test statistics	<i>F</i> = 0.355 <i>p</i> = 0.839	<i>F</i> = 0.766 <i>p</i> = 0.752	<i>F</i> = 0.889 <i>p</i> = 0.478	<i>F</i> = 1.100 <i>p</i> = 0.367	<i>F</i> = 0.370 <i>p</i> = 0.829	<i>F</i> = 0.347 <i>p</i> = 0.845	<i>F</i> = 0.772 <i>p</i> = 0.548

Statistically significant *p* values are indicated as* .

TABLE 4: Nursing students' Caring Behaviors Scale scores according to some descriptive characteristics.

	Assurance $\bar{x} \pm s.s$	Knowledge skill $\bar{x} \pm s.s$	Respectful $\bar{x} \pm s.s$	Loyalty $\bar{x} \pm s.s$	Caring Behaviors Scale total score $\bar{x} \pm s.s$
<i>Gender</i>					
Female	5.21 ± 0.69	5.01 ± 0.76	5.24 ± 0.65	5.14 ± 0.71	5.16 ± 0.65
Male	5.13 ± 0.78	5.12 ± 0.83	5.16 ± 0.75	5.11 ± 0.77	5.13 ± 0.73
Test statistics	$t = 1.102$ $p = 0.160$	$t = 1.213$ $p = 0.135$	$t = 1.107$ $p = 0.120$	$t = 0.501$ $p = 0.359$	$t = 0.488$ $p = 0.272$
<i>Age</i>					
18–23	5.18 ± 0.72	5.02 ± 0.77	5.20 ± 0.68	5.11 ± 0.63	5.14 ± 0.68
24–28	5.55 ± 0.61	5.47 ± 0.79	5.63 ± 0.43	5.61 ± 0.46	5.57 ± 0.51
Test statistics	$t = -2.250$ $p = 0.189$	$t = -2.451$ $p = 0.280$	$t = -2.679$ $p = 0.047$	$t = -2.900$ $p = 0.053$	$t = -2.709$ $p = 0.120$
<i>Grade</i>					
1st-grade student	5.15 ± 0.76	4.98 ± 0.89	5.17 ± 0.77	5.06 ± 0.80	5.10 ± 0.75
2nd-grade student	5.12 ± 0.69	4.99 ± 0.73	5.16 ± 0.62	5.11 ± 0.65	5.10 ± 0.62
3rd-grade student	5.28 ± 0.68	5.11 ± 0.74	5.29 ± 0.63	5.20 ± 0.71	5.23 ± 0.64
4th-grade student	5.21 ± 0.74	5.06 ± 0.80	5.24 ± 0.72	5.15 ± 0.76	5.17 ± 0.71
Test statistics	$F = 1.046$ $p = 0.372$	$F = 0.662$ $p = 0.576$	$F = 0.952$ $p = 0.415$	$F = 0.659$ $p = 0.578$	$F = 0.939$ $p = 0.422$
<i>Marital status</i>					
Married	4.87 ± 0.61	4.66 ± 0.11	5.19 ± 0.46	4.93 ± 0.46	4.92 ± 0.57
Single	5.20 ± 0.72	5.04 ± 0.77	5.22 ± 0.68	5.14 ± 0.73	5.16 ± 0.68
Test statistics	$t = 1.104$ $p = 0.422$	$t = 1.189$ $p = 0.590$	$t = 0.098$ $p = 0.252$	$t = 1.078$ $p = 0.294$	$t = 1.007$ $p = 0.690$
<i>Economical situation</i>					
Income less than expenses	5.20 ± 0.73	5.01 ± 0.80	5.24 ± 0.66	5.15 ± 0.68	5.16 ± 0.67
Income and expenses equal	5.17 ± 0.71	5.03 ± 0.78	5.18 ± 0.70	5.11 ± 0.75	5.13 ± 0.69
Income more than expenses	5.29 ± 0.66	5.20 ± 0.70	5.35 ± 0.66	5.23 ± 0.72	5.27 ± 0.64
Test statistics	$F = 0.489$ $p = 0.613$	$F = 0.879$ $p = 0.416$	$F = 1.024$ $p = 0.360$	$F = 0.546$ $p = 0.580$	$F = 0.713$ $p = 0.491$
<i>Place of residence</i>					
In dormitory	4.40 ± 0.68	4.64 ± 0.89	4.00 ± 0.72	4.06 ± 0.69	4.26 ± 0.64
At home with friends	4.50 ± 0.77	4.76 ± 0.89	4.06 ± 0.81	4.13 ± 0.78	4.36 ± 0.75
At home with family	4.18 ± 0.92	4.41 ± 1.09	3.81 ± 0.84	3.87 ± 0.84	4.07 ± 0.87
Alone					
Test statistics	$F = 1.084$ $p = 0.355$	$F = 2.691$ $p = 0.046$	$F = 0.963$ $p = 0.410$	$F = 2.006$ $p = 0.112$	$F = 1.491$ $p = 0.216$
<i>The state of being exposed to violence</i>					
Yes	5.07 ± 0.72	4.82 ± 0.85	5.17 ± 0.68	5.00 ± 0.71	5.03 ± 0.69
No	5.21 ± 0.71	5.06 ± 0.75	5.22 ± 0.68	5.15 ± 0.73	5.17 ± 0.67
Test statistics	$t = -1.208$ $p = 0.838$	$t = -2.029$ $p = 0.141$	$t = -0.543$ $p = 0.448$	$t = -1.304$ $p = 0.367$	$t = -1.341$ $p = 0.722$
<i>To deal with violence</i>					
Do nothing	5.01 ± 0.89	4.72 ± 1.08	4.97 ± 0.68	4.96 ± 0.62	5.02 ± 0.81
Friend support	4.87 ± 0.79	4.60 ± 0.81	5.23 ± 0.69	5.09 ± 0.74	4.94 ± 0.59
Support from managers	5.18 ± 0.62	4.51 ± 0.69	5.300 ± 0.63	4.96 ± 0.51	5.16 ± 0.55
Go away	5.04 ± 0.83	4.68 ± 0.95	5.23 ± 0.54	5.10 ± 0.55	4.95 ± 0.84
Test statistics	$F = 0.138$ $p = 0.968$	$F = 0.409$ $p = 0.801$	$F = 0.260$ $p = 0.902$	$F = 0.159$ $p = 0.958$	$F = 0.156$ $p = 0.959$

Note. *t*: Student *t*-test; *F*: one-way ANOVA; $p < 0.05$. Statistically significant *p* values are indicated as*.

that the violence management competencies of the nursing students included in our study were at a high level (Table 2). Hopkins et al. [73] of Western Australian nursing students' clinical practice during their aggression and violence in the work they have done to determine the extent and characteristics of nursing students in the clinical setting at a serious risk of aggression and violence faced and have determined what they feel. It was determined that male students in this

study had higher mean scores in the postevent recovery subdimension of the Violence Management Adequacy Scale than female students (Table 5). Yang et al. [74], in their study to determine the incidence, type, related factors, and effects of workplace violence on mental health nurses, determined that male nurses had a significantly higher incidence of verbal aggression, sexual harassment, and physical assault than female nurses. It has also been reported that male

TABLE 5: Violence Management Proficiency Scale scores of nursing students according to some descriptive characteristics.

Variable, <i>n</i> = 454	Violence Management Proficiency Scale in application areas			Violence Management Proficiency Scale in application areas' total score averages $\bar{x} \pm s.s$
	Postevent recovery $\bar{x} \pm s.s$	Violence information management $\bar{x} \pm s.s$	Violence response and interaction $\bar{x} \pm s.s$	
<i>Gender</i>				
Female	40.28 ± 5.66	33.47 ± 5.72	11.18 ± 2.32	23.56 ± 3.62
Male	40.44 ± 6.98	34.21 ± 6.58	11.45 ± 2.31	24.00 ± 4.07
Test statistics	<i>t</i> = -0.253 <i>p</i> = 0.003*	<i>t</i> = -1.163 <i>p</i> = 0.040	<i>t</i> = -1.094 <i>p</i> = 0.874	<i>t</i> = -0.968 <i>p</i> = 0.109
<i>Age</i>				
18-23	40.23 ± 6.00	33.52 ± 5.95	11.21 ± 2.31	23.62 ± 3.73
24-28	42.36 ± 6.21	36.73 ± 5.23	12.21 ± 2.46	24.84 ± 3.89
Test statistics	<i>t</i> = -1.512 <i>p</i> = 0.708	<i>t</i> = -2.311 <i>p</i> = 0.527	<i>t</i> = -1.840 <i>p</i> = 0.722	<i>t</i> = -1.385 <i>p</i> = 0.688
<i>Grade</i>				
1st-grade student	39.10 ± 7.43	33.37 ± 6.99	11.02 ± 2.54	23.27 ± 2.54
2nd-grade student	40.05 ± 5.17	33.13 ± 5.30	11.25 ± 2.09	23.46 ± 3.61
3rd-grade student	40.58 ± 5.95	34.11 ± 6.23	11.27 ± 2.28	23.90 ± 3.72
4th-grade student	41.09 ± 5.82	33.91 ± 5.59	11.37 ± 2.44	23.92 ± 3.33
Test statistics	<i>F</i> = 1.956 <i>p</i> = 0.120	<i>F</i> = 0.694 <i>p</i> = 0.556	<i>F</i> = 0.368 <i>p</i> = 0.776	<i>F</i> = 0.760 <i>p</i> = 0.517
<i>Marital status</i>				
Married	40.40 ± 5.98	33.71 ± 5.90	11.29 ± 2.29	23.74 ± 3.77
Single	34.33 ± 6.37	29.50 ± 6.80	8.50 ± 3.08	18.66 ± 3.66
Test statistics	<i>t</i> = 2.466 <i>p</i> = 0.734	<i>t</i> = 1.727 <i>p</i> = 0.477	<i>t</i> = 2.948 <i>p</i> = 0.231	<i>t</i> = 3.336 <i>p</i> = 0.790
<i>Economical situation</i>				
Income less than expenses	39.60 ± 6.33	33.67 ± 6.27	11.05 ± 2.43	4.01 ± 0.30
Income and expenses equal	40.54 ± 5.42	33.50 ± 5.56	11.32 ± 2.19	3.40 ± 0.21
Income more than expenses	42.24 ± 7.76	34.64 ± 6.93	11.67 ± 2.60	4.51 ± 0.74
Test statistics	<i>F</i> = 3.296 <i>p</i> = 0.038	<i>F</i> = 0.598 <i>p</i> = 0.550	<i>F</i> = 1.333 <i>p</i> = 0.265	<i>F</i> = 1.244 <i>p</i> = 0.289
<i>Place of residence</i>				
In dormitory	40.58 ± 5.97	33.99 ± 5.92	11.40 ± 2.26	23.87 ± 3.76
At home with friends	42.37 ± 6.04	35.93 ± 6.75	12.43 ± 2.03	24.56 ± 4.01
At home with family	39.35 ± 5.99	32.38 ± 5.69	10.68 ± 2.43	23.04 ± 3.58
Alone	41.12 ± 7.41	35.87 ± 6.91	11.75 ± 1.75	24.12 ± 4.38
Test statistics	<i>F</i> = 1.926 <i>p</i> = 0.125	<i>F</i> = 3.380 <i>p</i> = 0.018	<i>F</i> = 4.529 <i>p</i> = 0.004*	<i>F</i> = 1.760 <i>p</i> = 0.154
<i>The state of being exposed to violence</i>				
Yes	39.72 ± 6.28	32.85 ± 6.04	10.53 ± 2.68	22.78 ± 3.81
No	40.39 ± 5.99	33.75 ± 5.99	11.33 ± 2.26	23.78 ± 3.22

TABLE 5: Continued.

Variable, $n = 454$	Violence Management Proficiency Scale in application areas			Violence Management Proficiency Scale in application areas' total score averages	
	Postevent recovery $\bar{x} \pm s.s$	Violence information management $\bar{x} \pm s.s$	Violence response and interaction $\bar{x} \pm s.s$	Response to violence $\bar{x} \pm s.s$	
Test statistics	$t = -0.724$ $p = 0.643$	$t = -0.984$ $p = 0.739$	$t = -2.259$ $p = 0.098$	$t = -1.726$ $p = 0.799$	$t = -1.291$ $p = 0.779$
<i>To deal with violence</i>					
Do nothing	36.07 ± 11.07	28.46 ± 8.67	9.46 ± 3.79	20.46 ± 6.97	$94.29 \pm$
Friend support	38.40 ± 7.02	33.60 ± 3.50	10.80 ± 1.30	23.40 ± 3.57	$106.40 \pm$
Support from managers	41.20 ± 6.33	35.40 ± 4.42	11.20 ± 1.93	23.80 ± 1.68	$111.68 \pm$
Go away	38.95 ± 5.90	32.77 ± 6.50	10.31 ± 2.95	22.59 ± 3.80	$104.69 \pm$
Test statistics	$F = 0.879$ $p = 0.483$	$F = 2.035$ $p = 0.103$	$F = 1.500$ $p = 0.216$	$F = 1.104$ $p = 0.365$	$F = 1.588$ $p = 0.192$

TABLE 6: Correlation of resilience care behaviors and violence management proficiency.

Spearman's rho		
Resilience Scale-Violence Management Proficiency Scale	<i>r</i>	0.399
	<i>p</i>	0.001*
Caring Behaviors Scale-Resilience Scale	<i>r</i>	0.255
	<i>p</i>	0.001*
Violence Management Proficiency Scale-Caring Behaviors Scale	<i>r</i>	0.514
	<i>p</i>	0.001*

nurses tend to feel more protective towards female nurses and, therefore, have a higher risk of exposure to aggressive patients [75, 76]. In our study, it was determined that the violence management adequacy scores of the nursing students living with their friends at home were statistically significantly higher than the other groups (Table 5). When the literature is examined, studies in which the violence tendencies of nursing students are determined [77, 78] have been found, but there has been no study examining the violence management competencies of nursing students. The comparison of this aspect of our study with the literature remained limited.

In this study, a statistically significant positive correlation was found among nursing students' levels of resilience, care behaviors, and violence management competencies (Table 6). When the literature is examined, Jeong and Lee [79] reported a positive relationship between verbal abuse experience and emotional coping style in their study to determine the effect of verbal abuse experience, coping style, and resilience on emotional response and stress in nursing students during clinical practice. Karabey et al. [55], in their study to determine the reflection of nursing students' violence tendencies on care behaviors, found that there was a statistically negative relationship between students' violence tendencies and care behaviors. Again, Labrague and Los Santos [80] and Tabakakis [81] reported that a high level of psychological resilience leads to positive results in the field of health by increasing the job satisfaction and performance of nurses. He et al. [82] and Rios-Risquez et al. [63] have also reported that psychological resilience has a significant relationship with positive psychological wellbeing. Lee and Kim [83], in their study to determine the effects of emotional intelligence and resilience on the relationship between type D personality and caring ability in nursing students, found that nursing students had a significant effect on having type D personality and psychological resilience.

5. Conclusion

It was determined that the psychological resilience of the nursing students included in the study was at a medium level and their caring behaviors and violence management skills were at a high level. It has also been determined that the students' age, gender, and residence status are effective variables for psychological resilience, while gender and residence status are effective variables on violence management competence. In the study, a statistically significant

positive relationship was found among nursing students' psychological resilience levels, caring behaviors, and violence management competencies.

It is thought that the quality of the care provided will increase by increasing the endurance levels of mental health nurse students and improving their violence management skills. It is also very important that theoretical and practical training on violence management and psychological resilience for nursing students is included in the curriculum during the education and training processes of nurse academicians. Nursing students should be supported to recognize and manage signs of violence in mental health environments and increase their individual resilience levels.

6. Implications for Nursing Practice

Nursing considers humans as a whole, biologically, psychologically, and socially, and sees the need for spiritual care as an undeniable fact. Nursing students who are young in the healthcare system and have insufficient clinical experience are exposed to violence in the workplace, have problems in violence management, and feel inadequate. It is an undeniable fact that violence in the workplace has a physical dimension as well as a psychological dimension, and it leaves permanent problems on the person. Workplace violence also reduces nursing students' job satisfaction, negatively affects the quality of education and patient care standards, and impairs students' communication skills with patients and other healthcare professionals. Especially challenging patient profiles and working conditions of mental health nurses challenge mental health nurses and mental health nurse students. It is important for nursing students, who are an important part of the healthcare team and future healthcare professionals, especially nursing students practicing in mental health practice areas, to build, learn, and develop their psychological resilience for the health of both themselves and the group they care for. In this context, nursing students need to be supported by nurse academicians and clinical nurses in recognizing and managing signs of violence in mental health environments and increasing their individual resilience levels. It is thought that the quality of nursing care will increase by determining the psychological resilience levels, caring behaviors, and violence management competencies of nursing students, who are the professionals of the future, during their education and training processes and by increasing their awareness.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Disclosure

This article was presented as an abstract paper at the 3rd International 4th National Public Health Nursing Congress, Turkey.

Conflicts of Interest

The authors declare that there are no conflicts of interest.

Authors' Contributions

TK was responsible for the design of the study and manuscript revision. TK, BÇ, and BS were responsible for literature searching, assessing the quality of literature, statistical analysis, writing, and methodological guidance.

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