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The Effects of Psychological Resilience on Aggression: A Study on Nurses*

Psikolojik Dayanıklılığın Saldırganlık Üzerindeki Etkisi: Hemşireler Üzerinde Bir Araştırma

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Abstract

Aim: Psychological resilience is a process that includes a person's ability to cope with the difficulties they face in life. Nurses have an important role in the health sector and serve in a stressful and demanding work environment. The aim of this study is to understand the effect of nurses' psychological resilience levels on aggression.

Method: The sample of the study consisted of 278 nurses working in a medical faculty hospital. The "Brief Psychological Resilience Scale" was used to measure psychological resilience and the "Aggression Scale" was used to measure aggression. The data collected in the study were analyzed with descriptive statistics, Pearson correlation and simple linear regression.

Results: Psychological Resilience Scale was found to be 3.16. Mean score for Aggression Scale; It was found to be 2.45, 2.04 for the Physical Aggression sub-dimension, 2.50 for the Anger sub-dimension, 2.59 for the Hostility sub-dimension and 2.71 for the Verbal Aggression sub-dimension. According to the correlation analysis, there is a very weak negative significant relationship between psychological resilience and aggression. According to the results of the regression analysis between psychological resilience and aggression, an increase in the level of psychological resilience is associated with a negative effect on the level of aggression.

Conclusion: As a result of the study, it was determined that as the professional years and experience of nurses increased, their psychological resilience levels also increased. This shows that professional experience has a positive effect on psychological resilience. In addition, individuals with high levels of psychological resilience generally show less aggression, while as the level of aggression increases, the levels of physical aggression, anger, hostility and verbal aggression also increase.

Keywords: Psychological resilience, aggression, nurse, resilience.

Öz

Amaç: Psikolojik sağlamlık, bir kişinin hayatta karşılaştığı zorluklarla başa çıkabilme becerisini içeren bir süreçtir. Hemşireler, sağlık sektöründe önemli bir role sahip olup stresli ve talepkar bir çalışma ortamında hizmet vermektedirler. Bu çalışmanın amacı, hemşirelerin psikolojik sağlamlık düzeylerinin saldırganlık üzerindeki etkisini anlamaktır.

Yöntem: Çalışmanın örneklemini bir tıp fakültesi hastanesinde görev yapan 278 hemşire oluşturmuştur. Araştırmada psikolojik sağlamlığı ölçmek için "Kısa Psikolojik Sağlamlık Ölçeği", saldırganlığı ölçmek için ise "Saldırganlık Ölçeği" kullanılmıştır. Araştırmada derlenen veriler betimsel istatistikler, Pearson korelasyon ve basit doğrusal regresyon ile analiz edilmiştir.

Bulgular: Psikolojik Sağlamlık Ölçeğinin ortalama puanı 3,16 olarak bulunmuştur. Saldırganlık Ölçeği için ortalama puan; 2,45, fiziksel saldırganlık alt boyutu için 2,04, öfke alt boyutu için 2,50, düşmanlık alt boyutu için 2,59 ve sözel saldırganlık alt boyutu için 2,71 olarak bulunmuştur. Korelasyon analizine göre psikolojik sağlamlık ile saldırganlık arasında negatif yönde anlamlı çok zayıf bir ilişki vardır. Psikolojik sağlamlık ve saldırganlık arasındaki regresyon analizi sonuçlarına göre, psikolojik sağlamlık düzeyindeki artış saldırganlık düzeyi üzerinde negatif bir etkiyle ilişkilendirilmiştir.

Sonuç: Çalışma sonucunda hemşirelerin mesleki yıl ve tecrübeleri arttıkça, psikolojik sağlamlık düzeylerinin de arttığı saptanmıştır. Bu, mesleki deneyimin psikolojik sağlamlık üzerinde olumlu bir etkiye sahip olduğunu göstermektedir. Ayrıca psikolojik sağlamlık düzeyi yüksek olan bireyler genellikle daha az saldırganlık gösterirken, saldırganlık düzeyi arttıkça fiziksel saldırganlık, öfke, düşmanlık ve sözel saldırganlık düzeyleri de artmaktadır.

Anahtar Sözcükler: Psikolojik sağlamlık, saldırganlık, hemşire, sağlamlık.

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Introduction

Resilience is a dynamic process that involves an individual's ability to effectively cope with the significant challenges they face in life (Luthar et al., 2000). Werner (2004) defines resilience as "*people's ability to effectively cope with stressful situations in their environment and internal states caused by their vulnerabilities*". The term "vulnerability" in this definition refers to people's propensity for negative outcomes. As people encounter more challenging life events, they must be able to use more of their protective factors. Every person must balance risk and protective factors throughout his/her life and strive to improve protective factors. This is because every person may experience a developmental crisis that causes stress during the developmental period throughout their lives. Given both the definitions and development of psychological resilience, it develops in people after they encounter risky situations, adapt to these situations better with the help of protective factors, or when the risks are eliminated with ordinary results (Alnar, 2015).

Many people develop strategies to overcome difficulties and lead a fulfilling life. They may struggle for a while following the events, but eventually, they gather themselves and continue with their lives (Southwick and Charney, 2018). However, many people can switch to new challenges and show resilience after standing temporary loss or potentially traumatic events without any noticeable impairment in their ability to function at work or in close relationships (Banonno, 2004). Resilience is more complex than a simple psychological trait or biological phenomenon. As anyone who studies human behavior knows, ideas, emotions and behaviors are complex byproducts of genetic, biological, psychological, and social influences (Southwick and Charney, 2018). Norman Garmezy (1993), one of the pioneers in the development of psychological resilience, defined that it is the capacity for recovery and sustained adaptive behavior that becomes evident after the initial withdrawal or inadequacy following the onset of a stressful event. Masten et al. (1990) defined it as the ability to adapt successfully when faced challenging or dangerous situations. According to Tusaie and Dyer (2004), resilience is the process of responding to stress factors such as trauma, tragedy, threats, familial and relational problems, financial problems, and health issues. According to Zautra and Sturgeon (2016), resilience is based on three factors: how quickly and completely a person recovers from stress, a person's ability to focus while under stress, and a person's ability to gain psychological insights from stressful experiences. These examples demonstrate that resilience produces one or more adaptive responses that not only contribute to survival but also allow for development, growth, and progress in the face of adversity (Khosla, 2017).

The challenging and stressful situations people encounter throughout their lives can arise at any time in their business and professional lives, as well as in the normal course of life. The workplace where individuals work is one of the main sources of stress (Mealer et al., 2014). A person's emotional, cognitive, behavioral, and mental reaction to the negative aspects of his/her job and workplace is referred to as occupational stress (Ghanei et al., 2013). An imbalance in job demands, skills, and social support, or any combination of these, can cause healthcare workers to experience work-related problems or occupational stress (Ruotsalainen et al., 2014). Nursing is an inherently stressful profession (Babanataj et al., 2019), and nurses constitute the largest segment of the healthcare workforce worldwide (Tabakakis et al., 2019). Nurses are exposed to extensive stress at work due to turnover, conflicts with colleagues, employee unhappiness, feelings of inadequacy, upbringing, absenteeism, and insufficient care time (Hosseini et al., 2011). Furthermore, working conditions are suboptimal, including irregular and long working hours, which are known to increase psychological vulnerability (Jang et al., 2016; Yılmaz and Üstün, 2018). Working closely with patients and the complexity of the doctor-patient correlation results in a range of emotions, both in a positive and negative way. Long working hours and sleep deprivation have a detrimental effect on physical and mental well-being (McKinley et al., 2019). Aggressive and violent behaviors toward healthcare workers also cause an unsafe working environment (Liu et al., 2019).

In recent years, there has been a significant emphasis on resilience worldwide to reduce the adverse effects of workplace stress and prevent negative psychosocial outcomes among nurses (Badu et al., 2020). There is a growing understanding that a modern healthcare workforce must be resilient to cope with challenging situations. Although there is a growing interest in workplace resilience, particularly concerning staff retention, the concept of resilience among healthcare professionals is within primary care setting needs. In the hospital environment, primary care services are mostly community-based. (Robertson et al., 2016). Considering that stressors are inevitable in the field of nursing and that nurses need to be protected from the psychological and behavioral effects of stress, it is crucial for them to take action to reduce occupational stress by learning coping mechanisms (Babanataj et al., 2019). Programs have been created to ensure resilience among nurses (Shakerinia and Mohammadpour, 2010). Some studies show that nurses can develop resilience coping strategies and adapt positively to stressful work experiences (Amini et al., 2013; Mealer et al., 2012).

Working in the field of healthcare is rewarding but also challenging. It is important TO acknowledge that the workplace alongside its policies and practices can significantly enhance flexibility or actually contribute to employee stress (Scammell, 2017). To adapt to dynamic changes in healthcare practices, there is a need for increased resilience that helps cope with stressors and challenges in the workplace (Scholes, 2008). The concept of aggression is a multifaceted and multi-dimensional phenomenon with many different meanings and expressions at the behavioral level (Gendreau and Archer, 2005). When someone is intentionally harmed, aggression manifests as a physical or verbal attack. In addition, aggression may be driven by emotional arousal or serve as a means in performing a malicious action. Any action carried out with the intention of harming or injuring someone or something, whether directly or indirectly, physically, verbally, psychologically, or socially is considered aggressive behavior (Mann and Yadav, 2016). Although the concept of aggression is the focus of social psychology in the scientific community, it is defined differently in psychiatry, neurology, and psychological sciences. Aggression is a dynamic and variable process due to the complex structure of human behavior (Gendreau and Archer, 2005).

Nurses are one of the fundamental components of healthcare services and play an important role in the healthcare sector (Tabakakis et al., 2019). Due to the nature of their profession, nurses work in close contact with patients and serve in a stressful and demanding work environment (Hosseini et al., 2011). Therefore, nurses' psychological resilience and aggression levels have a significant impact on their professional performance, patient care and job satisfaction. Conversely, aggression toward healthcare professionals is a serious problem that nurses may encounter in the course of their professional experience (Liu et al., 2019). Aggression can include aggressive behavior toward nurses, whether physically, verbally, or psychologically, and can negatively impact their safety and psychological well-being. The consequences of aggression on nurses can affect their professional performance, motivation, job satisfaction and psychological resilience. For this reason, it is important to understand the correlation between nurses' levels of psychological resilience and aggression. However, studies examining nurses' psychological resilience and aggression levels are limited in the literature. This study was conducted to examine the effect of nurses' psychological resilience on their aggression levels.

Method

Purpose and Type of Research: This study is a descriptive and cross-sectional study conducted to examine the effect of nurses' psychological resilience levels on their aggression levels.

Research Questions: The problems sought to be answered in this study are as follows.

- What is the level of aggressive behavior attitudes of nurses in their work environments?
- What is the level of psychological resilience of nurses in their work environments?
- Is there a relationship between the level of psychological resilience of nurses and aggressive behavior?
- Does the level of psychological resilience of nurses affect their aggressive behavior?

Place and Characteristics and Time of the Research: This study conducted between September 2022 and April 2023 at Necmettin Erbakan University Meram Medical Faculty Hospital, which provides healthcare services in Konya province of Turkey.

Population and Sample of the Study: Its population consisted of 970 nurses employed at Meram Medical Faculty Hospital. The sample size was calculated as 278 with a 95% confidence level and 5% margin of error based on the population.

Data Collection Tools: Within the scope of the objectives of the study, two measurement tools described below were applied to nurses. The Brief Psychological Resilience Scale was developed by Smith et al. (2008), its validity and reliability in Turkish were made by Doğan (2015), and it is a 5-point Likert-type, 6-item, self-report measurement tool. The Aggression Scale was developed by Buss and Perry in 1992, and its validity and reliability in Turkish were made by Demirtas Madran (2012). It is a 5-point Likert-type scale consisting of 29 items. It aims to measure four different dimensions of aggression: physical aggression, verbal aggression, hostility and anger. The physical aggression sub-dimension includes 9 questions related to physically harming others; the verbal aggression sub-dimension includes 5 questions related to verbally hurting others; the anger sub-dimension includes 7 questions aiming to measure the emotional dimension of aggression; and the hostility sub-dimension includes 8 questions aiming to measure the cognitive dimension of aggression. The reliability of the scales used in the study was determined by determining the Cronbach's alpha coefficient. The Brief Psychological Resilience Scale yielded a Cronbach's alpha value of α=.77; the Aggressiveness Scale had α=0.87, and organizational performance had α=0.87.

Data Collection: Data were collected from nurses by researchers through face-to-face surveys.

Data Analysis: SPSS 25 statistical package program was used to evaluate the study data. Normality test was applied for each scale, kurtosis and skewness values were found and the distribution of the data was examined with Q-Q Plot test and histogram. In addition, comparisons were made with socio-demographic variables of the dimensions and parametric tests were applied to obtain significant differences between the groups. "Analysis of variance (ANOVA) (F Test)" was applied for demographic variables with three or more groups and "t test" was used for binary groups to reach the results. The relationship between the aggression levels of individuals and psychological resilience was examined with Pearson Correlation analysis.

Ethical Aspects of the Research: For the scales to be used in the study, permission was obtained from the scale owners via e-mail. For the study, permission was obtained from Necmettin Erbakan University Health Sciences Ethics Committee with the decision dated 11.05.2022 and numbered 2022/223. Participation in the study was voluntary. A declaration was obtained from the participants before answering the questionnaire questions regarding their voluntary participation in the study. Participants were informed that they had the right to withdraw from the study at every stage of the study. To conduct the research, institutional permission was received from Necmettin Erbakan University Meram Medical Faculty Hospital Chief Physician.

Limitations of the Research: The study's limitations include that the participants are only nurses who are actively employed at NEU Meram Medical Faculty Hospital; therefore, the research results are exclusively applicable to the group participating in the research.

Results

Table 1. Descriptive information about participants (N:278)

Variables		n	%
Age	18-28	124	44.6
	29-38	109	39.2
	≥39	45	16.2
Education	High school-associate degree	66	23.7
	Undergraduate-Graduate	212	76.3
Working Year	1-10 Year	175	62.9
	11+ Year	103	37.1
Sex	Female	217	78.1
	Male	61	21.9
Unit of Study	Basic-Clinical Medicine	190	68.3
	Surgical Medicine	88	31.7
Marital Status	Married	172	61.9
	Single	106	38.1
Exposure to Violence	Yes	184	66.2
	No	94	33.8
Witnessing Violence	Yes	222	79.9
	No	56	20.1

Of the participants, 78% were women, 61.9% were married, 76.3% had undergraduate and graduate degrees, 44.6% were between the ages of 18 and 28 years, and 62.9% were between the ages of 1 and 10 years. Of them, 68.3% were employed in the fields of basic medicine and clinical medicine. A total of 66.2% of the participants had experienced violence in their professional life and 79.9% had witnessed a healthcare worker being subjected to violence in their professional life (Table 1).

Table 2. Mean Scores of the Scales Used in the Study

	Mean	SD	Minimum	Maximum
Psychological Resilience	3.16	0.63	1.67	4.67
Overall of Aggression	2.45	0.52	1.24	3.72
Physical Aggression	2.04	0.68	1.00	3.89
Anger	2.50	0.76	1.00	4.43
Hostility	2.59	0.65	1.00	4.50
Verbal Aggression	2.71	0.67	1.00	4.80

The mean score for the Psychological Resilience Scale was found to be 3.16. The mean score for the Aggression Scale was found to be 2.45, 2.04 for the Physical Aggression sub-dimension, 2.50 for the Anger sub-dimension, 2.59 for the Hostility sub-dimension, and 2.71 for the Verbal Aggression sub-dimension. It is understood that as the means approach 5, the attitude of the sample towards that sub-dimension increases, and as they approach 1, it decreases (Table 2).

Table 3. Comparison of Scale Scores According to Descriptive Characteristics and Violence

Scale and Subscales		**Sex**		
	Female (n:217) $\bar{X}$ (SD)	**Male (n:61) $\bar{X}$ (SD)**	**t**	**p**
Psychological Resilience	3.12 (0.61)	3.33 (0.66)	-2.303	**0.022***
Overall of Aggression	2.40 (0.51)	2.61 (0.54)	-2.797	**0.006****
Physical Aggression	1.92 (0.64)	2.46 (0.68)	-5.806	**<0.001**
Anger	2.48 (0.74)	2.55 (0.81)	-.680	0.497
Hostility	2.61 (0.64)	2.50 (0.68)	1.207	0.228
Verbal Aggression	2.66 (0.65)	2.90 (0.68)	-2.539	**0.012***
		Working Year		
	1-10 year (n:175) $\bar{X}$ (SD)	**≥11 Year (n:103) $\bar{X}$ (SD)**	**t**	**p**
Psychological Resilience	3.10 (0.638)	3.27 (0.600)	-2.227	**0.027***
Overall of Aggression	2.45 (0.523)	2.44 (0.524)	.124	0.901
Physical Aggression	2.01 (0.789)	2.09 (0.670)	-.945	0.346
Anger	2.56 (0.758)	2.39 (0.742)	1.782	0.076
Hostility	2.63 (0.660)	2.53 (0.635)	1.232	0.219
Verbal Aggression	2.66 (0.660)	2.80 (0.670)	-1.678	0.094
		Exposure to Violence		
	Yes (n:222) $\bar{X}$ (SD)	**No (n:56) $\bar{X}$ (SD)**	**t**	**p**
Psychological Resilience	3.16 (0.63)	3.17 (0.63)	-.103	0.931
Aggression	3.48 (0.51)	2.31 (0.69)	2.244	**0.026***
Physical Aggression	2.08 (0.67)	1.85 (0.69)	2.265	**0.024***
Anger	2.54 (0.74)	2.34 (0.78)	1.777	0.077
		Witnessing Violence		
	Yes (n:184) $\bar{X}$ (SD)	**No (n:94) $\bar{X}$ (SD)**	**t**	**p**
Psychological Resilience	3.11 (0.62)	3.27 (0.63)	-2.070	**0.039***
Aggression	2.52 (0.50)	2.29 (0.53)	3.639	**<0.001**
Physical Aggression	2.13 (0.68)	1.85 (0.65)	3.360	**0.001****
Anger	2.59 (0.77)	2.31 (0.70)	2.915	**0.004****

*p<0.05; **p<0.01

The participants' psychological resilience and aggression levels differed significantly by gender (p<0.05). Accordingly, psychological resilience and aggression dimensions, as well as physical aggression and verbal aggression subdimensions, were found to be higher in men than in women. The participants' psychological resilience levels differed significantly by the years of study (p<0.05). Accordingly, the psychological resilience levels of the participants with 11 years or more of experience ($\bar{X}$=3.27) were higher than the psychological resilience levels of the participants with 1-10 years of experience ($\bar{X}$=3.10) (Table 3).

The aggression and its subdimensions among the participants who were exposed to violence were higher than those of the other participants. The psychological resilience levels of participants exposed to violence were lower than those of other participants. There was a significant difference between witnessing violence, aggression and physical aggression subdimensions. The aggression and physical aggression levels of the participants who witnessed violence were higher than those of the others. The psychological resilience, aggression, physical aggression, anger, hostility and verbal aggression levels of the participants did not differ significantly based on marital status, working unit, age and education level (p>0.05) (Table 3).

Table 4. Correlation Analysis for Resilience and Aggression Scale

		1	2	3	4	5	6
1	Psychological Resilience	1					
2	Overall of Aggression	-0.183*	1				
3	Physical Aggression	-0.034	0.798*	1			
4	Anger	-0.180*	0.841*	0.585*	1		
5	Hostility	-0.383*	0.796*	0.405*	0.673*	1	
6	Verbal Aggression	0.077	0.652*	0.405*	0.446*	0.369*	1

*p<0.001

The correlation analysis showed a very weak negative correlation between psychological resilience and aggression scale total mean scores (r:-0.183, p<0.01). There was a highly significant positive correlation between aggression and physical aggression (r: 0.798, p<0.01). There was a high positive correlation between aggression and anger (r: 0.841, p<0.01) and hostility (r: 0.796, p<0.01). Furthermore, there was a moderately significant positive correlation between aggression and verbal aggression (r: 0.652, p<0.01) (Table 4).

Table 5. Regression table for the effect of psychological resilience on aggression (N:278)

Independent Variable	B	SE	Beta	t	p	95% CI	
						Lower Bound	Upper Bound
Constant	-0.018	0.055		-0.333	0.739	-0.127	0.090
Psychological Resilience	-0.205	0.066	-0.183	-3.090	0.002*	-0.336	-0.074
R^2: 0.03, F: 9.545, p=0.002*							

B: Unstandardized coefficients, Beta: Standardized coefficient, CI: Confidence interval, SE: Standard error

*p<0.01

According to the results of the regression analysis, the participants' psychological resilience level explained 3% of the aggressive behaviors (F=9.545, p<0.01, R^2=0.03). It was determined that a one-point decrease in the psychological resilience level reduced aggressive behaviors by 0.205 points (B=-0.205, p<0.01) (Table 5).

Discussion

This study aims to determine the psychological resilience and aggressive behavior levels of nurses and to determine the effect of psychological resilience on aggression. This section presents the findings resulting from the analyses and discusses them together with other studies.

The mean score of the Psychological Resilience Scale was at a medium level. Similarly, the mean scores of the Aggression Scale and its subdimensions were at a medium level (Table 2). Similar results were observed in the study conducted by Hökkaş (2019). Hökkaş's study indicated that the nursing profession has a challenging and stressful nature. It further noted that protective factors that can cope with this stressful environment promote the psychological resilience of nurses. Other studies conducted on nurses show that despite the difficulties in the work environment, nurses are able to cope with the stressful and challenging situations they encounter thanks to the education, knowledge and experience they receive, as well as various personal characteristics that contribute to them, such as self-confidence, autonomy, coping and adapting to situations, creating a motivating life force and post-traumatic growth (Çam and Büyükbayram, 2017; Ülker Tümlü and Recepoğlu, 2013). In a study conducted with the participation of emergency nurses, it was stated that negative outcomes such as leaving the job could be prevented if the endurance levels of nurses were increased (Park and Song, 2023). Another

study results show that nurses' resilience levels may affect their reactions to violence (Hollywood and Philips, 2020). In a study in Istanbul with 280 nurses, a positive correlation was observed between psychological resilience and compassion satisfaction and professional quality of life (Atay et. al., 2021).

More than half of the participants in this study have reported being exposed to violence in their professional lives (Table 1). This finding shows that violence is a potential problem in the healthcare sector and many healthcare professionals encounter such experiences. A significant number of participants have witnessed one or more healthcare professionals being exposed to violence throughout their professional lives. Similarly, more than half of the nurses employed in a hospital emergency room were exposed to violence, half of these nurses were exposed to verbal violence, and nearly half of them were exposed to physical violence (Ferri et al., 2016). Likewise, in a study including 275 nurses, nearly half of the nurses were exposed to physical violence at least once (Magnavita and Heponiemi, 2011).

Concerning psychological resilience and aggression levels in terms of gender, a statistically significant correlation was found (Table 3). Men's psychological resilience levels were higher than those of women. The level of aggression and physical aggression varies significantly by gender. The aggression level of men was higher than the aggression level of women. Likewise, men's levels of physical aggression and verbal aggression were higher than those of women. The anger and hostility subscales do not show significant differences based on gender. In his study, Hökkaş (2019) found that gender did not affect the psychological resilience levels of nurses but still the need for discussion considering that women had higher psychological resilience scores than those of men. In their study on university students, Duman et al. (2020) found that students' psychological resilience did not differ significantly based on gender. In his study with university students, Terzi (2008) stated that gender did not make any difference in psychological resilience. Some studies have also found that women's psychological resilience levels are higher than those of men (Güngörmüş et al., 2015; Önder and Gülay, 2008). The differences in findings, with some studies showing significant differences while others do not, could be attributed to different stress levels between genders. In addition, men's greater vulnerability and susceptibility to certain risk factors compared to women (Garmezy, 1993) may increase the possibility that women's psychological resilience is higher than men.

There is a significant difference between the levels of psychological resilience and exposure to violence in professional life (Table 3). The psychological resilience levels of nurses who were not subjected to violence was higher than that of nurses who were subjected to violence. The aggressiveness, physical aggressiveness, anger, hostility, and verbal aggression levels of nurses who were subjected to violence were higher than those of nurses who were not subjected to violence. In this regard, participants who were not exposed to violence had higher psychological resilience and lower levels of aggression. The participants who were not exposed to violence worked in a safe working environment and were less affected by the negative effects of violence. This increased the psychological resilience and aggression levels of the participants. There are significant differences between nurses' aggression levels, physical aggression levels and witnessing violent events. The aggression and physical aggression levels of nurses who witnessed violence were higher than those of nurses who did not witness violence (Table 3). This suggests that participants who witnessed violent events had higher levels of aggression. In addition, there is a very weak negative correlation between psychological resilience and aggression (Table 4). In general, nurses with high psychological resilience have lower levels of aggression. Similarly, Mann and Yadav's (2016) study on adolescents found a negative correlation between psychological resilience and aggression. Another study conducted on university students found a significant negative correlation between psychological resilience, aggression and hostility. Therefore, Mojrian et al. (2017) suggested to increase people's resilience with specific teaching programs to reduce the basis of aggression and hostility.

There is a highly significant positive correlation between aggression and physical aggression, as well as between anger and hostility (Table 4). This shows that as the level of aggression increases, the levels of physical aggression, anger and hostility also increase. In his research on high school students, Karataş (2008) showed a positive and significant correlation between anger and aggression. In another study conducted with 201 adolescents who lived in orphanages, there was a positive significant correlation between anger and aggression (Kesen et al., 2007). The results of the regression analysis between psychological resilience and aggression suggested that an increase in the level of psychological resilience had a negative effect on the level of aggression (Table 5). This shows that each unit increase in the level of psychological resilience causes a decrease in the level of aggression. In this regard, psychological resilience has a significant effect on aggression, and as the level of psychological resilience increases, the level of aggression decreases.

Conclusion and Recommendations

Consequently, individuals with high levels of psychological resilience show less aggression in general. Conversely, as the level of aggression increases, the levels of physical aggression, anger, hostility and verbal aggression also increase. Additionally, the study results show that nurses' professional experience and gender affect their psychological resilience levels. As nurses' professional years and experience increase, their psychological resilience levels tend to increase.

In the light of this study's findings, nurses should improve their skills in coping with stress, attend psychological resilience training, and create support groups with their colleagues. Health institutions should create support programs for nurses, help assistance to nurses in workload and time management, and pay attention to reporting violence and feedback processes.

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