

# Nursing Students' Tendency To Aggression and Relevant Factors

## Hemşirelik Öğrencilerinin Saldırganlık Eğilimleri ve İlişkili Faktörler

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### SUMMARY

**Objectives:** The objective is to evaluate tendencies to aggression among nursing students and to analyze the risk factors that may increase the aggression.

**Methods:** The population of our descriptive and cross-sectional study consists of 350 students studying at the department of nursing of a university in Istanbul. Sampling includes 236 students who are representative of the population, are 18 years or older, and were selected with the basic random sampling method. All volunteered to participate in the study. The data were obtained using the questionnaire form and the Aggression Scale, and the self-rating method was used to obtain data. Statistical data analysis was performed using chi-square test, Mann-Whitney U test and logistic regression analysis.

**Results:** The aggression scores of the males whose mothers were exposed to physical violence by their fathers, who were exposed to physical violence by their mothers and fathers, and who used physical violence were found statistically more significant. As a result of the logistic regression analysis, being exposed to physical violence by the mother, using physical violence, being a male, having a father who uses physical violence against the mother, mother's and father's educational status of primary school and having two or more siblings are specified as certain risk factors for the high tendency to aggression.

**Conclusion:** Considering the outcomes of the study, we recommend that education programs be prepared in order to evaluate nursing students in terms of these risk factors, and for nursing students who display a high tendency toward aggression.

**Keywords:** Aggression; factors related to aggression; nursing students; violence.

### ÖZET

**Amacı:** Çalışma, hemşirelik öğrencilerinin saldırganlık eğilimlerini değerlendirmek ve saldırganlığı etkileyen risk faktörlerinin neler olduğunu incelemek amacıyla yapılmıştır.

**Gereç ve Yöntem:** Tanımlayıcı ve kesitsel tipteki çalışmamızın evrenini, İstanbul'daki bir üniversitenin hemşirelik bölümünde öğrenim gören toplam 350 öğrenci, örnekleme ise evreni temsil gücüne sahip, basit rastgele örnekleme yöntemi ile seçilen, 18 yaşını doldurmuş ve çalışmaya gönüllü katılmayı kabul eden 236 öğrenci oluşturmuştur. Veriler, anket formu ve Saldırganlık Ölçeği kullanılarak elde edilmiş, veri toplamada öz bildirim tekniği kullanılmıştır. İstatistiksel veri analizi ki-kare testi, mann-whitney U testi ve lojistik regresyon analizi kullanılarak gerçekleştirilmiştir.

**Bulgular:** Erkeklerin, babası tarafından annesine fiziksel şiddet uygulananların, anne ve babanın fiziksel şiddetine maruz kalanların ve fiziksel şiddet uygulayanların saldırganlık puanları istatistiksel olarak anlamlı düzeyde daha yüksek bulunmuştur. Lojistik regresyon analizi sonucunda, anneden fiziksel şiddet görmek, fiziksel şiddet uygulamak, erkek olmak, babası tarafından annesine fiziksel şiddet uygulanmış olması, annenin ve babanın ilkökul düzeyinde eğitime sahip olması ve 2 ve üzerinde kardeşe sahip olmak, yüksek saldırganlık eğilimi için risk faktörü olarak belirlenmiştir.

**Sonuç:** Çalışmanın bulguları sonucunda, belirtilen riskler açısından hemşirelik öğrencilerinin değerlendirilmesi ve yüksek saldırganlık eğilimi gösteren hemşirelik öğrencilerine yönelik eğitim programlarının hazırlanması önerilir.

**Anahtar sözcükler:** Saldırganlık; saldırganlıkla ilişkili faktörler; hemşirelik öğrencileri; şiddet.

### Introduction

Today, violence is a significant health issue. The World Health Organization (WHO) reports that violence affects all age groups, while the probability for individuals to be a victim of violence is higher during puberty (12–24 years). Young people are more vulnerable to violence when they are trying to socialize with others.<sup>[1,2]</sup> In recent years, the number of cases related to violence against young people increased

dramatically. Violence against young people is indicated as an ongoing and growing issue in the report (2007) of the Investigation Commission of the Grand National Assembly of Turkey.<sup>[3]</sup>

Externalized aggression can be seen in manipulative behaviors, theft, fighting, shirking responsibilities, problems in adapting to society and not being able to establish healthy communication. Internalized aggression can result in anxiety, depression, fear, shame, low self-confidence, desperation and introversion. Young people and children who are exposed to violence often have behavioral problems.<sup>[1,4,5]</sup>

Aggression is related to violence and violence indicates any kind of undesired material and non-material elements or actions that are against the physical and mental integrity of an individual.<sup>[1]</sup> Aggression is, however, described in various ways by several theoreticians. Ballard et al. describe aggres-

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sion as a behavior aiming to harm other people physically and emotionally.<sup>[6]</sup> Fromm (1993) describes it as a biological reaction when someone's existence is threatened.<sup>[7]</sup> Freedman et al. (1989) describe aggression as any kind of behavior aiming to hurt other people.<sup>[8]</sup> Riches (1986) describe it as a tool people use to change their social environment<sup>[9]</sup> and Köknel (1995) describes it as a direct expression of anger.<sup>[10]</sup>

The most significant tendency causing violence is the violent behaviors of the individuals. Gordon (1999) notes that adolescents may react and therefore tend to be violent when they are restrained and not sympathized and consider authority figures as enemies.<sup>[11]</sup>

Buss (1961) describes aggression as physical or verbal aggression, active or passive aggression, or direct or indirect aggression. Behaviors like pushing, beating or biting are examples of physical aggression. Using words that hurt the feelings of another is an example of verbal aggression.<sup>[12]</sup>

There are various factors that play a role in the emergence of violent behavior. These include biological factors (deficiency in the functions of frontal and temporal lobes of the brain, deficiencies in neurotransmitters such as norepinephrine and dopamine,<sup>[13]</sup> psychological or psychiatric factors such as instinctive behavior, egocentrism, rigidity, impulsivity, mental disorders, or personality disorders<sup>[14,15]</sup>). Genetic and social factors (poor peer relationships, exposure to violence, low success at school, poor housing and a lower standard of living, alcohol and substance addiction, domestic violence, and economic issues<sup>[16]</sup>) also play a role.

Bandura (1977) implied that aggressive behavior is passed down from one generation to another by social learning. According to social learning theory, aggression is learned by observation or imitation. The more frequent a behavior is corroborated, the more permanent it becomes, and the more likely that it can be passed down to the next generations.<sup>[17]</sup> Many studies revealed that individuals who are exposed to or witness domestic violence are more prone to being either victims or perpetrators of violence.<sup>[18-20]</sup> As in many developing countries, physical punishment is a common discipline method for raising children in Turkey.<sup>[21]</sup> Therefore, it seems that the issue of violence will remain on the agenda for years to come.

Since the early 1980s, there have been various studies related to reducing violence. However, we frequently see news related to violence, and see reports of a young person killing another young person, a patient's relative killing a member of the medical staff, and a man killing a woman. For young people, initiatives in preventing violence are as significant as the fight to reduce violence. In order to effectively reduce violence, it is critical to understand the tendencies that cause violence among young people, and to identify the kind of variables related to these tendencies.

A review of the literature revealed on the frequency of violence generally contained studies related to violence among young people.<sup>[22-24]</sup> However, certain individuals who may have a higher tendency to aggression do not behave aggressively and do not use violence. When nursing students are raised as a part of society, they learn the norms of the society in which they live. It is significant to identify the risk factors regarding the tendency toward violence of nursing students, because they are the health professionals of the future, and they will be part of the solution for reducing violence. While there are studies that evaluate the aggression characteristics of different groups in Turkey,<sup>[25]</sup> the number of the studies that specify the aggression tendencies of nursing students, and the factors affecting these tendencies is quite limited.<sup>[26]</sup> This study aims to evaluate nursing students' tendencies to aggression, and to analyze the risk factors that affect this aggression.

## Materials and Method

### Participants

The population of our descriptive and cross-sectional study consists of 350 first-year, second-year and third-year students studying at the department of nursing of a university (Marmara University) in İstanbul. Fourth-year students are not included in this study as they were not present at the school due to the internship programs. Sampling consists of 236 students who are representative of the population, are 18 years or older, and who were selected using the basic random sampling method. All volunteered to participate in the study. The confidence interval and the error margin were accepted as 0.05 in the calculation of the sampling volume. As a result of this calculation, at least 206 persons were found to be representative of the population. Before the study began, written permission was obtained from the managers, and permission was obtained from the ethics committee of the university. Verbal approval was obtained from the students in the population after they were informed about the study.

### Data Collection Tools

The data were obtained using the questionnaire form and Aggression Scale (AS) as well as the self-rating method.

*Questionnaire Form:* The questionnaire form, which was prepared by the researchers in accordance with the literature, consists of two parts. The first part includes questions related to demographic characteristics (age, sex etc.) and family characteristics (family type, family residence, education level of mother / father and number of siblings) of the participants. The second part, on the other hand, includes questions related to the occasions when the participants used physical violence, and when they were subject to violence.

*Aggression Scale (AS):* The Turkish validity and reli-

ability study of this scale that was developed by Buss and Perry (1992)<sup>[27]</sup> and revised by Buss and Warren (2000)<sup>[28]</sup> was conducted by Can in 2002.<sup>[29]</sup> This five-point Likert scale consists of 34 entries. Participants have five options for each entry. These options are: (1) not suitable at all, (2) hardly suitable, (3) slightly suitable, (4) quite suitable and (5) completely suitable. This scale has five sub-dimensions which are aggression, verbal aggression, anger, hostility, and indirect aggression. The lowest and highest score participants can get from the scale are 34 and 170. In addition to the sub-dimension scores obtained from the scale, it is possible to use the total scale score.<sup>[27,30,31]</sup> In the original version of the scale, the score can be used to grade the aggression. According to this classification, the rate of  $\leq 58$  indicates a low aggression level, 59–110 indicates a medium aggression level and  $\geq 111$  indicates a high aggression level.<sup>[27,28,29]</sup> Cronbach's alpha internal consistency coefficient was found to be 0.91 in the validity and reliability analyses of the Turkish form of the scale. Cronbach's alpha internal consistency coefficient for the sub-dimensions was found to be 0.83–0.85 for physical aggression, 0.36–0.59 for verbal aggression, 0.72–0.74 for anger, 0.74–0.75 for hostility and 0.36–0.53 for indirect aggression.<sup>[29]</sup> Cronbach's alpha internal consistency coefficient was found to be 0.88 for the entire scale. Cronbach's alpha internal consistency coefficient for the sub-dimensions was found to be 0.82 for physical aggression, 0.48 for verbal aggression, and 0.54 for anger, 0.62 for hostility and 0.57 for indirect hostility.

### Statistical Assessment

Data analysis was performed using the SPSS 14 statistical program (SPSS, Chicago, IL, USA). The data were analyzed using the chi-square test and the Mann-Whitney U test  $p=0.05$  was used in comparing all of the data.

Three models were developed for the research and for assessing the risks related to medium level aggression and high level aggression. Multi categorical logistic regression analysis was used in this assessment.

Three models were used in our study to evaluate the relationship of sociodemographic factors to the factors of violence and aggression level. This was done both separately and together. The independent variables of witnessing domestic violence, parent violence and using violence, which may be risk factors for both medium aggression level and high aggression level, were included in Model 1. Model 2 consists of independent variables (sociodemographic characteristics) which may be risk factors. Model 3, on the other hand, includes all independent variables that may be risk factors.

Model conformity of these three models was evaluated with the Hosmer and Lemeshow Test. As the insignificant results of the test ( $p>.05$ ) indicated that model-data confor-

mity was sufficient, logistic regression analysis was deemed appropriate in two models.

### Results

In our study including 236 participants, 80.5% ( $n=190$ ) of the participants were females and 19.5% ( $n=46$ ) were males. The mean age of the participants was  $19.6\pm 1.8$ , and 54.7% were reported to be living in rural areas before studying at the university. Primary school graduation rates of mothers and fathers of the participants were 46.6% ( $n=110$ ) and 73.7% ( $n=174$ ) respectively. Other data related to demographic and family characteristics of the participants are presented in Table 1.

When the aggression scores of the participants were evaluated according to various characteristics of the participants, the aggression scores of the males ( $84.4\pm 18.3$ ) were significantly higher than those of the females ( $69.53\pm 14.6$ ) ( $p=0$ ). The aggression scores of those ( $80.6\pm 3.1$ ), whose father used physical violence against their mothers, were significantly higher than the others ( $71\pm 1.1$ ) ( $p<0.05$ ). The aggression scores of the participants, who were physically abused by their mothers ( $77.2\pm 18.3$ ) and those who were physically abused by their fathers ( $80.3\pm 18.1$ ), were found to be more statistically significant than those who were not physically abused ( $p=0$ ). The aggression points of those ( $79.9\pm 17.8$ ), who used physical violence, were found more statistically significant than those ( $66.3\pm 12.1$ ) who did not ( $p=0$ ) (Table 2).

When the aggression scale sub-dimension scores of the participants were analyzed, the highest score was at the anger sub-dimension ( $18.8\pm 4.4$ ), and the scale score means of all participants was found to be  $72.3\pm 16.4$  (Table 3).

**Table 1.** Introductory characteristics of the participants ( $n=236$ )

	n	%	Mean $\pm$ SD
Age (Years)			19.6 $\pm$ 1.8
Sex			
Female	190	80.5	
Male	46	19.5	
The place they have resided most			
Rural	129	54.7	
Urban	107	45.3	
Number of siblings			3.8 $\pm$ 2.3
Educational status of the father			
Primary school	110	46.6	
Secondary/high school	44	18.6	
University	82	34.7	
Educational status of the mother			
Primary school	174	73.7	
Secondary/high school	29	12.3	
University	33	14	
Father has a job with regular income	167	70.8	
Mother has a job with regular income	43	18.2	

SD: Standard deviation.

**Table 2.** Comparison of the Participants' Aggression Scores in Accordance with Their Characteristics (n=236)

	n	%	Mean±SD	Z	p
Sex					
Female	190	80.5	69.53±14.6	-4.7	=0
Male	46	19.5	84.4±18.3		
Physical violence by the father against the mother					
Present	32	13.6	80.6±3.1	-2.8	<0.05
Not Present	204	86.4	71±1.1		
Physical violence from the mother					
Present	102	43.2	77.2±18.3	-3.5	=0
Not present	134	56.8	68.6±14		
Being exposed to physical violence from the father					
Present	52	22	80.3±18.1	-3.6	=0
Not present	184	78	70.1±15.1		
Using physical violence					
Those who use	105	44.5	79.9±17.8	-6.1	=0
Those who do not use	131	55.5	66.3±12.1		

SD: Standard deviation.

**Table 3.** Aggression Scale of the Participants and Their Sub-Dimension Scale Score Means (n=236)

	Mean±SD
Sub-Dimension of Anger	18.8±4.4
Sub-Dimension of Hostility	15.7±4.3
Sub-Dimension of Physical Aggression	13.3±5.2
Sub-Dimension of Verbal Aggression	12.2±2.9
Sub-Dimension of Indirect Aggression	12.1±3.6
Aggression Scale Total Score	72.3±16.4

SD: Standard deviation.

Logistic regression analysis was conducted to identify the risk factors of participants related to aggression; the results are presented in Table 4. Being a male increased the medium aggression level 1.3 (or 1.3; model 2) and 1.4 (or 1.4; model 3) times. Being a male also increased the high aggression level 3.2 (or 3.2; model 2) and 2.6 (or 2.6; model 3) times. Being a male was found to be a decent risk factor for a high aggression level.

Having two or more siblings was found to be a factor that increased the normal and high aggression risk 1 time (or 1.05) in both model 1 and 2. Risk of high aggression level for those, whose fathers are primary school graduates, is 1.2 times higher than those whose fathers are not. Risk of medium aggression level for those, who lived at rural areas for a long time, is 1.8 (or 1.8; model 2) and 1.9 (or 1.9; model 3) times higher than those who did not.

Being exposed to the violence of the father was determined to be a risk factor (or 1.29 Model 1; or 1.2 Model 3) for a medium aggression level. The risk of a medium aggression level for those who experienced violence at the hands of their mothers is 1.14 (or 1.14 model 1) and 1.31 times (or 1.31 Model 3) higher than those who did not. In addition, the risk of a high aggression level was 7.1 (or 7.1; model 1) and 6.02 (or 6.02; model 3) times higher than those who did not. Being exposed to violent behavior of the mother was detected to be a significant risk factor that increased the ag-

**Table 4.** Evaluating the factors affecting aggression level with logistic regression analysis

Variable	Medium aggression level			High aggression level		
	Model 1 OR (Sig)	Model 2 OR (Sig)	Model 3 OR (Sig)	Model 1 OR (Sig)	Model 2 OR (Sig)	Model 3 OR (Sig)
Age		0.92 (0.41)	0.89 (0.26)		1.13 (0.39)	1.12 (0.47)
Male		1.3 (0.56)	1.4 (0.47)		3.2 (0.18)	2.6 (0.30)
Number of siblings (2 or more) †		1.05 (0.53)	1.05 (0.60)		1 (0.95)	1.06 (0.73)
Mother's educational status of primary school		0.93 (0.86)	0.90 (0.79)		1.5 (0.73)	1.09 (0.94)
Father's educational status of primary school		1.07 (0.85)	0.99 (0.99)		1.2 (0.83)	1.2 (0.80)
Living in rural areas for a long time		1.8 (0.07)	1.9 (0.05)		0.30 (0.15)	0.33 (0.22)
Being exposed to physical violence from the mother	1.14 (0.72)		1.31 (0.48)	7.1 (0.08)		6.02 (0.12)
Being exposed to physical violence from the father	1.29 (0.62)		1.2 (0.69)	0.28 (0.18)		0.21 (0.14)
Physical violence by the father against the mother	1.63 (0.42)	1.9 (0.29)	2.9 (0.29)		1.9 (0.56)	
Using physical violence	1.77 (0.13)	2 (0.48)	1.5 (0.24)	5.5 (.13)	6.8 (0.08)	4.6 (0.20)
Model Chi-square**	X=1.8 p=0.77	X=14.4 p=.07	X=6.9 p=0.62	X=3.09 p=0.79	X=10.5 p=0.23	X=11.1 p=0.19

\*\*Hosmer and Lemeshow Test.

gression level. The risk of a high aggression level for those whose father used physical violence against their mother was detected to be 2.9 (or 2.9; model 1) and 1.9 (or 1.9; model 3) times higher than those whose father did not use violence against their mother.

The risk of a high aggression level for those who used physical violence was detected to be 5.5 (or 5.5 model 1), 6.8 (or 6.8 model 2) and 4.6 (or 4.6 model 3) times higher than those who did not use violence. The findings obtained in the logistic regression analysis are presented in Table 4.

## Discussion

The findings of this study indicated that high aggression level could increase for males whose fathers used violence against their mothers, who experienced violence at the hands of their mothers, for those males who used physical violence. We are of the opinion that our study will contribute to understanding the causes of young people's tendency to violence. These tendencies have recently become more and more significant.

The anger sub-dimension scores of the participants were detected to be higher than other sub-dimension scores. When the factors related to medium and high aggression levels were evaluated, the risk factors were identified as being exposed to violence at the hands of the mother, using violence, being a male, having a father who used physical violence against the mother, the mother's primary school educational status, the father's primary school educational status, and having two or more siblings.

The basic trigger for aggression is anger. Actually, anger is a healthy and natural emotion when expressed correctly.<sup>[10]</sup> However, verbal or physical aggression may occur as certain external and internal stimulants trigger the anger. In his study, Averill (1983) noted that when individuals become angry, 83% of them displayed an impulse toward verbal aggression, and 40% showed an impulse toward physical aggression.<sup>[32]</sup> Anger is one of the significant triggers for the aggression.<sup>[10]</sup> Therefore, improving the ability to control anger may have a significant role in preventing aggression.<sup>[30]</sup> Our study showed that the aggression score means of the participants were lower than those in other studies,<sup>[30]</sup> and that the anger sub-dimension score was as high as the rates reported in other studies.<sup>[33]</sup> In addition, using physical violence is a risk factor for a high aggression level. This action conforms to the findings indicating that individuals with high aggression levels use violence more frequently.<sup>[34]</sup> The fact that the aggression score means of the participants were lower than those in other studies may be related to the fact that the age group in our study was older, and that females constituted the majority.

It is a well-known fact that there are many factors related to aggression. Being a male is accepted as a significant risk factor for aggression. In many studies conducted with various age groups and related to the relationship between the sexes regarding aggression, males were found to have more tendencies to aggression than females, and they display more aggressive behaviors.<sup>[25,33,35-37]</sup> Our study indicates that males have higher aggression scores, and that being a male is a decent risk factor for high aggression levels. These findings comply with other studies. These findings may be related to the violent attitudes of the families raising male children,<sup>[21]</sup> much more physical violence used on male children<sup>[38]</sup> and male children using aggression to cope with the problems<sup>[10]</sup> of puberty. In Turkey, physical violence is frequently used as a form of punishment in raising children,<sup>[10]</sup> and particularly for male children.<sup>[37-40]</sup>

Violence is defined by the World Health Organization as "The action that is performed as a physical strength against other people and a deliberate threat or reality and causes or has the possibility to cause injuries, death and psychological exhaustion on these people", occurs as a physical, emotional, verbal and sexual violence.<sup>[1]</sup> It is reported that physical or sexual violence is used against 40% of individuals when they are young, against 8% during puberty, and against 25% during the period between puberty and adulthood.<sup>[41]</sup> Children are most exposed to domestic physical violence.<sup>[1,42]</sup>

The fact that individuals who are exposed to, or who witness<sup>[26,27,35,37,39,40,41,43]</sup> domestic violence<sup>[25,26,35]</sup> have higher aggression levels is supported by many studies. Findings related to the participants who experience violence at the hands of their mother are parallel to other studies.<sup>[26,43]</sup> Being exposed to a father's violence conforms to the findings of Duran and Ünsal's study.<sup>[26]</sup> The rate of this exposure is lower than the rate Ayan (2007) reports.<sup>[43]</sup> This difference may be related to the various age groups of the participants. The fact that our findings show similarity with the study of Duran and Ünsal (2014)<sup>[26]</sup> may be because both studies were carried out with participants with similar characteristics. The rate of participants who were exposed to a mother's violence is found to be higher than the rate of those who were exposed to a father's violence, which conforms to Ayan's (2007)<sup>[43]</sup> study.

This study revealed that aggression scores of those who were exposed to violence by both mother and father increased significantly. This finding is parallel to the findings of other studies.<sup>[26,43,44]</sup> The high aggression scores of those who were exposed to parental violence are the significant indicators that these individuals are negatively influenced when their mothers and fathers—also their role models—display aggressive behaviors.<sup>[21]</sup> Being exposed to the violence of the mother is specified as a significant risk factor for the high aggression level in our study.<sup>[34]</sup>

Child care and housework are the primary gender roles of females in Turkey. For women who have low education levels, are unemployed, have many children, have been exposed to physical violence, and have mental disorders, the probability of using violence against their children is remarkably high.<sup>[40,45]</sup> The majority of the mothers of the participants in the study is primary school graduates, unemployed and has 3.8+1.2 children on average. The risk factors identified in the study are being exposed to a mother's violence, the mothers' educational status of primary school, and having two or more siblings. This specification conforms to other studies. The collected data can be explained considering the mothers' use of physical violence to restrain and punish children and young people. The finding indicates that restraining children and young people is a factor that increases the aggression level. An increase in the number of family members<sup>[43]</sup> and negative behaviors of the mother towards her child<sup>[43,45]</sup> are reported as the causes of the aggressive behaviors in children. Our study differs from Ayan's (2007) study in that educational status of the mother is found to be related to the aggression in our study.<sup>[43]</sup> These differences in the results of these studies can be explained considering that aggression may be due to several factors, such as family attitudes and personalities.

Studies revealed that physical violence used by the father against the children increased as the number of the siblings in the family increased.<sup>[26,43]</sup> Our study proved that having two or more siblings is a risk factor for high aggression. This study found that fathers with the educational status of primary school are more aggressive, as it was also found in other studies that examined the relationship between the characteristics of the fathers and aggression. Contrary to what the literature indicates, being exposed to violence from the father is found to be a risk factor for a medium aggression level, not for a high aggression level.<sup>[43]</sup> One of the significant risk factors for a high aggression level is the mother being exposed to physical violence from the father. Should a child witness domestic physical violence, s/he may model that behavior, and use physical violence as a troubleshooting method in the future.<sup>[21]</sup> We were informed that witnessing physical violence used by the father on the mother increased the aggressive behaviors of the individuals<sup>[35,45]</sup> and these individuals were more violent.<sup>[46,47]</sup> This information supports our finding. Ayan's (2007) study reveals that a father's violence against the mother did not increase the level of violence,<sup>[43]</sup> which is different from our findings. This difference may be due to the fact that Ayan used a younger age group and participants did not notice the physical violence used by the father against the mother. Domestic violence by the mother or the father against the child, and by the males against the females, may be one of the most significant causes of violence being passed down to younger generations.<sup>[17]</sup> Thus prevent-

ing the violence before it occurs is crucial. Identifying the tendencies toward aggression of nursing students is critical. This can enable them to gain anger management skills early on, and prevent the aggression. After they gain these skills, they will be able to solve the problems they face in their careers and private lives using proper communication methods, and without reacting aggressively. Nurses play significant roles in reducing the tension when they face a difficult patient or patient relative. Nurses can perform this duty only when they use their anger management skills properly. Anger management skills can be improved through participation in anger and aggression management programs.<sup>[30,31,44]</sup> It may be beneficial for the nursing students with a high aggression risk to participate in these programs before they graduate. In addition, considering the roles that psychiatric nurses play in counseling individuals and families, it can be expected that they have the ability to reduce aggressive tendencies.

#### Restrictions of the study:

The number of male participants in our study is limited as it was conducted with students in the department of nursing. This study cannot be generalized as it was conducted on a certain group.

#### Outcome:

Being exposed to a mother's violence, using violence, being a male, having a father who used physical violence against the mother, the mother's educational status of primary school, the father's educational status of primary school and having two or more siblings are found to be risk factors for high aggression levels.

#### Outcomes of the research prove that:

- It may be beneficial to detect the nursing students with high aggression tendencies, ensure that they participate in training to improve anger management skills, and create parental training programs for mothers and fathers.

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