

# PERCEPTIONS AND PREDICTORS OF DATING VIOLENCE AMONG NURSING AND MIDWIFERY STUDENTS: A CROSS-SECTIONAL STUDY FROM TURKEY

## Abstract

**Aims:** To determine the prevalence and predictors of victimization and perpetration of dating violence among nursing and midwifery students

**Background:** Previous studies reported that nurses lack the knowledge, attitudes, skills, and self-confidence necessary to address interpersonal violence due to inadequate instruction and training during their education. The majority of the research done on dating violence has involved western cultures. In countries such as Turkey, where dating with a girl/boy is not accepted by cultural factors and extramarital affairs are ended by honor killings, dating violence continues to be an implicit problem.

**Design:** A cross-sectional study design.

**Methods:** The sample consisted of nursing and midwifery students (n = 603) at the largest state university in southeastern Turkey. Data were collected with a validated, investigator-designed survey instrument from September 2015 to January 2016.

**Findings:** The majority of the participants had been exposed to dating violence. Jealousy, controlling behavior, and restrictions on another's social life were not perceived as violent behavior in dating relationships. There was no significant relationship of DV violence with gender, smoking, place of residence, or marijuana use. Exposure to parental violence and alcohol use were found to be the strongest predictors of being a perpetrator of violence in the DV perpetration model.

**Conclusion:** The findings highlight the lack of recognition of dating violence among nursing and midwifery students. The perceptions of students should be enriched by adding content on violent behaviors in the curriculum of nursing and midwifery programs.

## **WHY IS THIS RESEARCH NEEDED?**

- Recognition of violent behaviors among young adults is crucial to prevent future violence against women.
- Most research on dating violence has involved general college students in western cultures. However, little is known about the prevalence and predictors of victimization and perpetration of dating violence among nursing and midwifery students in conservative societies.

## **WHAT ARE THE KEY FINDINGS?**

- An important finding was the high rate of exposure to dating violence among nursing and midwifery students.
- Verbal and psychological violence were determined to be the most frequently encountered types of violence in dating relationships.
- Exposure to parental violence and alcohol use were found to be the strongest predictors of being a perpetrator of violence in a dating relationship.

## **HOW SHOULD THE FINDINGS BE USED TO INFLUENCE POLICY, PRACTICE, RESEARCH, OR EDUCATION?**

- The knowledge of students in nursing and midwifery schools should be enriched by adding content about dating violence to their programs' curriculum.
- Nursing and midwifery schools should establish social support groups where students can share their experiences about violent behaviors and develop affective skills to identify and react to dating violence.
- Further studies are needed to examine the effects of conservative attitudes, family characteristics, and gender roles on dating violence in male-dominated societies.

**Key Words:** Abuse; behavior; culture; dating violence; midwifery; nursing; Turkey

## **INTRODUCTION**

Violence against dating partners in adolescent and adult romantic relationships is regarded as an important public health issue, which has attracted worldwide attention (Chan, Straus, Brownridge, Tiwari, & Leung, 2008; Chen, 2009; Dalfo-Pibernat & Feijoo-Cid, 2017; Lehrer, Lehrer, & Koss, 2013). Studies have indicated that the prevalence rates of physical dating violence (DV) in various countries, including the United States (14.8%), Sweden (12.7%), Hong Kong (21.3%), and the United Kingdom (31.5%), are unacceptably high (Chan et al., 2008; Gressard, Swahn, & Tharp, 2015; Zhang et al., 2016). The prevalence of sexual DV victimization is 13.8% in the United States (Gressard et al., 2015), 9.2% in the Netherlands, and 42% in Greece (Chan et al., 2008). The results of local studies in Turkey have shown that the DV rate varies from 29% to 79.5% (Aslan, Vefikuluçay, Zeyneloğlu, Erdost, & Temel, 2008; Toplu-Demirtas, Hatipoglu-Sümer, & White, 2013).

### **Background**

DV is classified as a type of intimate partner violence (IPV) and is defined as physical, sexual, psychological, or emotional violence within dating relationships or between current or former dating partners, which is prevalent from the middle school years throughout young adulthood (Ferreira, Lopes, Aparicio, Cabral, & Duarte, 2014; Miller, 2017). DV differs from other types of violence in the way it is experienced and its consequences. It is difficult to intervene in DV, and people often try to solve these problems on their own, feel ashamed of it, and prefer to hide it (Aslan et al., 2008; Ferreira et al., 2014). Previous studies have focused on women's experiences of violence in marital relationships and on men as domestic violence perpetrators. However, recent studies have indicated that violence outside marriage is more common as "mutual abuse" (Barreira, de Lima, Bigras, Njaine, & Assis, 2014; Ferreira et al., 2014; Miller, 2017; Volpe, Hardie, & Cerulli, 2012).

DV has long-term consequences (O'Leary, Smith Slep, Avery-Leaf, & Cascardi, 2008; Ohnishi et al., 2011; Vagi, O'Malley Olsen, Basile, & Vivolo-Kantor, 2015), such as higher levels of depression, suicidal thoughts and attempts, anxiety (Volpe et al., 2012), psychological distress, and physical injury. It increases antisocial behaviors and risky behaviors, such as smoking, alcohol and substance use (Reyes, Foshee, Tharp, Ennett, & Bauer, 2015; Zhang et al., 2016), having multiple sex partners, and engaging in unsafe sex, which can lead to sexually transmitted diseases and unwanted pregnancies (Zhang et al., 2016). DV has also been found to be associated with poorer educational outcomes (Banyard & Cross, 2008), low self-confidence (Garcia Diaz et al., 2013), insecurity, fear of marriage and incompatibility after long-term romantic relationships, and predictors of violence in future relationships (Reyes et al., 2015; Rothman, Bair-Merritt, & Tharp, 2015).

Riggs and O'Leary (1989) developed the conceptual framework called the background–situational model to explain risk factors of DV. In the model, background risk factors include gender, race/ethnicity, having a parent with less than a high school education, living in a single-parent home, witnessing inter-parental conflict, and experiencing parental violence and divorce (Foshee, McNaughton Reyes, et al., 2015; Foshee, Reyes, & Ennett, 2010; Reyes et al., 2015; Riggs & O'Leary, 1989). Situational risk factors include anger, anxiety, substance use (e.g., heavy alcohol and marijuana use) (East & Hokoda, 2015; Foshee, Chang, McNaughton Reyes, Chen, & Ennett, 2015; Gressard et al., 2015; Reyes et al., 2015; Shorey, Brasfield, Zapor, Febres, & Stuart, 2015), depression, dominance and violence approval (Ozaki & Otis, 2016), not being religious, jealousy (Collibee & Furman, 2016), and relationship length and satisfaction.

Culture is an important factor in understanding how societies perceive violent behaviors. For example, in some societies, jealousy in dating relationships is an expected behavior perceived as an expression of love and is not recognized as a violent act (Aslan et al., 2008;

Haglund, Belknap, & Garcia, 2012). Restriction of women's freedom and physical punishment are not regarded as violent behaviors (Aslan et al., 2008) in some parts of Turkey, where virginity, in particular, is highly valued and seen as connected to men's responsibility to protect the honor of the family. Even in some developed societies, forced sexual intercourse or rape within marriage is not perceived as a violent act and might not be reported as sexual violence due to the perception that rape is done by strangers (Kalra & Bhugra, 2013).

The present study was conducted in southeastern Turkey, which is the region with the second highest rate of domestic violence. The population is more conservative and religious, and forced marriages, bride prices, and honor killings are common due to stronger patriarchal cultural traditions than in other parts of Turkey (DGSW, 2009). Understanding of DV and predictors of DV among students in nursing and midwifery are especially important for several reasons. First, students in nursing and midwifery programs constitute a unique population in Turkey. They usually come from rural places densely populated by patriarchal families with low socioeconomic status and higher rates of domestic violence. Men are believed to have the right to control women, women's freedom is restricted, and physical punishment is accepted as a disciplinary practice in childrearing (Orhon, Ulukol, Bingoler, & Gulnar, 2006). The majority of students from these families perceive college life as granting the freedom to have romantic relationships without their parents' knowledge. However, openly dating is not socially accepted, so most dating relationships are secret. Consequently, in conservative countries such as Turkey, students living apart from their families and facing violent behavior in dating relationships prefer not to tell about their experiences due to fears of social exclusion, their parents' reactions to their romantic relationships, and the possibility their family will force them to leave school. All these dynamics increase the likelihood of DV among students attending nursing and midwifery schools. Thus, DV continues to be a covert problem no one wants to talk about (Ferreira et al., 2014; Foshee, McNaughton Reyes, et al., 2015).

Second, nurses and midwives, who are the largest group among female healthcare professionals, can play a vital role in identifying and intervening in domestic violence, especially in eastern cultures where women have a tendency to share the problems they experience in marriages with female health professionals. Moreover, nurses as women have higher risk of domestic violence, since violence against women is more common compared to men in conservative countries like Turkey. Students in these programs, therefore, also need to have training to understand DV and its impacts on individual physical, psychological, and social well-being.

Third, previous international studies have reported that nurses lack the knowledge, attitudes, skills, and self-confidence necessary to address interpersonal violence due to inadequate instruction and training, indicating a need to develop DV-related knowledge, skills, and training in undergraduate curricula (Beccaria et al., 2013; Freedberg, 2008). A few studies on DV in Turkey have involved university students (Aslan et al., 2008; Toplu-Demirtas et al., 2013). However, we found no studies on DV victimization, perpetration, and predictors (e.g., residency place, alcohol use, and smoking, witnessing of violence between parents, and exposure to violence by parents) among nursing and midwifery students. To fill this gap, this study was intended to determine the prevalence of DV victimization (experience of violent behavior by a partner) and perpetration (committing violent behavior against a partner) and predictors of DV victimization or perpetration in dating relationships among nursing and midwifery students.

## **METHODOLOGY**

### **Aim**

The aim of the study was to determine the prevalence and predictors of DV victimization and perpetration among nursing and midwifery students and their recognition of violent behaviors.

*The research questions were:*

1. What is the prevalence of DV among nursing and midwifery students in the past 12 months?
2. What kinds of acts were accepted as violence in dating relationships among nursing and midwifery students?
3. What are predictors of DV victimization and perpetration among nursing and midwifery students?

### **Design**

We used a cross-sectional study design.

### **Participants**

For this cross-sectional study, a convenience sample of undergraduate nursing and midwifery students at a large state university was recruited. The universe of the study was included all midwifery and nursing students, therefore, a power analysis for the sample size was not calculated. The students were recruited using the university's registration list, and eligibility was limited to 637 students (464 nursing, 173 midwifery) registered in the theoretical and practical courses in the spring semester when the research was conducted. All undergraduate students (freshman, sophomore, junior, senior) in the spring semester in the nursing and midwifery programs were invited to participate in the study. The current nursing and midwifery program do not cover any subject on violent behaviors and dealing with violence at work or home including dating violence. The students who registered but did not attend the theoretical and practical courses in the studied semester (15 students) and who did not agree to participate in the study (19 students) were not included. The final analysis included 603 nursing and midwifery students at Gaziantep University in southeastern Turkey. The students at Gaziantep University come from the surrounding rural cities whose populations tend to be more conservative and have strong family bonds.

### **Data Collection**



Data were collected using an investigator-designed survey instrument with 43 items. We primarily used a modified version of Aslan et al. (2008) questionnaire, with some ideas for the instrument adapted from the DV literature (Aslan et al., 2008; Barreira et al., 2014; Lutzman, Vivolo-Kantor, Holditch Niolon, & Ghazarian, 2015; Ohnishi et al., 2011). The questionnaire consisted of two parts. The first part included questions related to the participants' gender, age, type of high school diploma (Turkey has two types of high school diplomas: 1—standard high school diploma and 2—vocational high school diploma), place of birth (classified as either rural or urban), place of residence, education, parents' working status, alcohol use, smoking, substance use, and status of ever experiencing physical violence (see the physical acts mentioned in the next paragraph) committed by parents and ever witnessing physical violence between parents.

The second part included a list of acts considered to be physical, psychological, and sexual violence. Incidents such as slapping, beating, pushing, pulling hair, and pinching were accepted as physical violence. Punishing, intimidating, humiliating, insulting, restricting self-expression, restricting freedom in decision-making, cheating on another, blaming, calling names, belittling, devaluing another's thoughts and feelings, ridiculing, restricting another's social life, controlling behavior, neglecting, chasing, and jealousy were accepted as psychological violence. Yelling, scolding, swearing, threatening, and insulting were accepted as verbal abuse. Unwanted touching, forced sexual intercourse, and forced non-use of contraception were accepted as sexual violence. The participants were asked to select options indicating whether they recognized these acts as "violent" or "not violent" or were "not sure." We also evaluated the participants' perpetration and victimization experiences using the same form. Victimization was measured by the question "In your current dating relationship, have you ever experienced any of the following acts from your partner?" Violence perpetration was measured by the question "In your current dating relationship, have committed any of the

following acts against your partner on purpose?” The participants were asked to mark “Yes” if they had been victimized or perpetrated an act in a dating relationship, and if not, to mark “No.”

After two nursing faculty members developed the questionnaire, the first draft of the instrument and its content validity was evaluated by an expert panel, which included two faculty members each from the university’s sociology and psychology departments. The questionnaire was pilot tested by 30 students (non-nursing students: 28, nursing students: 2) in different programs at the same university to assess the comprehensibility and usability of the instrument. A few minor changes were made to the questionnaire after evaluation by the expert panel and the pilot test. The study was conducted between September 1, 2015, and January 1, 2016. The participating students were asked to fill out the questionnaire after they provided written and verbal informed consent. The students who accepted participating in the study were asked not to write their names, and they were guaranteed that their answers would be kept confidential.

### **Ethical Considerations**

The researchers obtained ethical approval and permission from Gaziantep University, Faculty of Health Sciences. Before data collection, the students were informed of the study aim and the voluntary nature of participation. They were asked to give informed consent to participate.

### **Data analysis**

Data were analyzed using SPSS 18.0 (SPSS Inc., Chicago, Illinois, USA). Descriptive statistics were calculated as frequencies and percentages. Bivariate and multivariate analyses were conducted to assess the significance of various risk factors in predicting DV perpetration and victimization. Chi-square tests were performed in the bivariate analysis to determine the significance of the associations of various risk factors and DV perpetration and victimization. Risk factors that had significant associations with DV perpetration and victimization in the bivariate analysis were included in the multiple linear regression model. The participants’ age, gender, residence type (rural or urban) until secondary school, type of high school, experience

of parental violence, witnessing of violence between parents, and alcohol and substance use were included as significant predictors of DV perpetration and victimization in the multivariate model. The significance level was set at  $<.05$ .

## **FINDINGS**

### **Characteristics of the Participants**

A total of 603 university students participated in the study. The mean age of the students was  $20.5 \pm 2.1$  years (min = 18, max = 26), 60.3% were 18–20 years old, 92.9% were female, 54.4% were born in rural areas, 57.7% lived in rural areas until completing secondary school, and 64.3% graduated from standard high schools. The majority of the students' mothers (91.4%) and some of their fathers (11.6%) did not work, while 36.3% of the students' mothers and 55% of the fathers had only elementary school education. About 1 in 5 students (21.9%) used alcohol, and of these, 55.3% had started to consume alcoholic beverages after turning 18 years old. Little more than half of the students (51.4%) smoked cigarettes, 43.9% had five or more cigarettes a day, and very few (1.2%) used cocaine or marijuana.

### **Prevalence of Victimization and Perpetration of Dating Violence**

More than half of the students (66.3%) reported currently being in dating relationships, and of these, 60.2% had been in dating relationships for less than a year. The vast majority of the students (81.2%) reported exposure to DV, while 73.7% reported perpetrating violence against partners during dating relationships. Moreover, 75.3% had experienced physical violence by parents, and 51.2% had witnessed physical violence between parents.

### **Students' Perceptions of Violent Acts**

Regarding the students' opinions on violent behaviors in dating relationships, 71.0% perceived slapping as physical violence, 87.9% perceived threatening, and 84.9% perceived swearing as verbal violence. The majority of the participants perceived punishment (82.3%), intimidation (82.1%), and humiliation in the presence of others (81.1%) as psychological violence.

Behaviors such as jealousy (87.7%), controlling behavior (72.0%), and restricting another's social life (63.0%) were not perceived as violent behavior. Interestingly, more than half of the students (71.3%) did not perceive unwanted touching as violent, and 26.2% did not perceive the act of forcing sexual intercourse as violent (see Table 1).

**Table 1. Recognition of Acts as Violence**

Acts	Violent		Not Violent		Not Sure	
	n	%	n	%	n	%
<b>Physical Violence</b>						
Slapping	428	71.0	143	23.7	32	5.3
Beating	428	71.0	140	23.2	35	5.8
Pushing	427	70.8	133	22.1	43	7.1
Pulling hair	191	31.7	328	54.4	84	13.9
Pinching	88	14.6	393	65.2	122	20.2
<b>Verbal Violence</b>						
Threatening	530	87.9	18	3.0	55	9.1
Cursing	512	84.9	45	7.5	46	7.6
Insulting	349	57.9	183	30.3	71	11.8
Scolding	165	27.4	368	61.0	70	11.6
Yelling	72	11.9	415	68.8	116	19.2
<b>Psychological Violence</b>						
Punishing	496	82.3	37	6.1	70	11.6
Intimidating	495	82.1	36	6.0	72	11.9
Humiliating	489	81.1	40	6.6	74	12.3
Insulting	475	78.8	50	8.3	78	12.9
Restricting self-expression	473	78.4	51	8.5	79	13.1
Restricting freedom in decision-making	456	75.6	49	8.1	98	16.3
Cheating on another	450	74.6	68	11.3	85	14.1
Blaming	429	71.1	51	8.5	123	20.4
Calling names	411	68.2	68	11.3	124	20.6
Belittling	407	67.5	87	14.4	109	18.1
Devaluing another's thoughts and feelings	355	58.9	105	17.4	143	23.7
Ridiculing	240	39.8	115	19.1	248	41.1
Restricting another's social life	116	19.2	380	63.0	107	17.7
Controlling behavior	95	15.8	438	72.6	70	11.6
Neglecting	84	13.9	437	72.5	82	13.6
Chasing	66	10.9	448	74.3	89	14.8
Jealousy	23	3.8	529	87.7	51	8.5
<b>Sexual Violence</b>						
Unwanted touching	91	15.1	430	71.3	82	13.6
Forcing sexual acts	385	63.8	158	26.2	60	10.0
Forcing not using contraceptives	276	45.8	249	41.3	78	12.9

The acts to which the students were most commonly exposed were hair pulling (87.3%), yelling (96.3%), limited decision-making freedom (87.6%), and unwanted touching (28.6%). Regarding perpetration of DV against partners in current relationships, 82.3% of the students reported pinching their partners, 79.0% yelling at them, and 84.7% experiencing jealousy (see Table 2).

**Table 2. Prevalence of Dating Violence Victimization and Perpetration of Violent Behaviors among Participants**

Acts	Victimization				Perpetration			
	Yes		No		Yes		No	
	n	%	n	%	n	%	n	%
<b>Physical Violence</b>								
Beating	109	33.5	216	66.5	136	46.1	159	53.9
Pushing	92	28.3	233	71.7	67	22.7	228	77.3
Pulling hair	284	87.3	41	12.7	243	82.3	52	17.7
Pinching	136	41.8	189	58.2	154	52.2	141	47.8
<b>Verbal Violence</b>								
Threatening	218	67.1	107	32.9	52	17.4	243	82.4
Cursing	255	78.4	70	21.6	180	31.0	115	39.0
Insulting	208	64.0	117	36.0	96	32.5	199	67.5
Scolding	307	94.4	18	5.6	254	86.1	41	13.9
Yelling	313	96.3	12	3.7	233	79.0	62	21.0
<b>Psychological Violence</b>								
Punishing	124	38.2	201	61.8	57	19.3	238	80.7
Intimidation	179	55.1	146	44.9	176	59.7	119	40.3
Humiliating	169	52.0	156	48.0	159	53.9	136	46.1
Insulting	126	38.8	199	61.2	69	23.4	226	76.6
Restricting self-expression	272	83.6	53	16.4	220	74.6	75	25.4
Restricting freedom in decision-making	285	87.6	40	12.4	250	84.7	45	15.3
Cheating on another	36	11.1	289	88.9	18	6.1	277	93.9
Blaming	180	55.4	145	44.6	180	61.0	115	39.0
Calling names	78	24.0	247	76.0	52	17.6	243	82.4
Belittling	126	38.8	199	61.2	123	41.7	172	58.3
Devaluing another's decisions	233	71.7	92	28.3	216	73.2	79	26.8
Ridiculing	216	66.5	109	33.5	211	71.5	84	28.5
Restricting social life	184	56.6	141	43.4	167	56.6	128	43.4
Controlling another's behavior	225	69.2	100	30.8	211	71.5	84	28.5
Neglecting	195	60.0	130	40.0	206	69.8	89	30.2
Chasing	102	31.4	223	68.6	52	17.6	243	82.4
Jealousy	274	84.3	51	15.7	221	74.9	74	25.1
<b>Sexual Violence</b>								
Unwanted touching	93	28.6	232	71.4	119	40.3	176	59.7
Forcing sexual acts	35	10.8	290	89.2	8	2.7	287	97.3
Forcing not using contraceptives	14	4.3	311	95.7	7	2.4	288	97.6

## Predictors of Dating Violence Victimization and Perpetration

It was found that as the students' ages increased, victimization and perpetration rates decreased ( $p < 0.05$ ). The chances of being a violent perpetrator were highest among students who graduated from standard high school, experienced physical violence by parents, and witnessed violence between parents ( $p < 0.05$ ). There was no significant relationship of DV violence with gender, smoking, place of residence, or cocaine or marijuana use ( $p > 0.05$ ) (see Table 3).

**Table 3. Predictors of Dating Violence Victimization and Perpetration**

Characteristics	Victimization				Perpetration			
	Yes		No		Yes		No	
	n	%	n	%	n	%	n	%
<b>Age (Years)</b>								
18–20	207	63.7	52	69.3	206	69.8	53	50.5
21–23	72	22.2	17	22.7	43	14.6	46	43.8
24–26	46	14.2	6	8.0	46	1.6	6	5.7
	$X^2 = 39.21$ $p < 0.05$				$X^2 = 40.03$ $p < 0.001$			
<b>Gender</b>								
Male	23	7.1	4	5.3	20	6.8	7	6.7
Female	302	92.9	71	94.7	275	93.2	98	93.3
	$X^2 = 0.294$ $p > 0.05$				$X^2 = 0.002$ $p > 0.05$			
<b>Type of High School</b>								
Standard high school diploma	231	71.1	57	76.0	225	76.3	63	60.0
Vocational high school diploma	94	28.9	18	24.0	70	23.7	42	40.0
	$X^2 = 0.733$ $p > 0.05$				$X^2 = 10.19$ $p < 0.05$			
<b>Exposure to Violence by Parents</b>								
Yes	253	77.8	58	77.3	252	85.4	59	56.2
No	72	22.2	17	22.7	43	14.6	46	43.8
	$X^2 = 0.009$ $p > 0.05$				$X^2 = 38.24$ $p < 0.05$			
<b>Witnessing of Violence between Parents</b>								
Yes	198	60.9	39	52.0	198	67.1	39	37.1
No	127	39.1	36	48.0	97	32.9	66	62.9
	$X^2 = 2.010$ $p > 0.05$				$X^2 = 28.81$ $p < 0.001$			
<b>Alcohol Use</b>								
Do not use	277	85.2	67	89.3	271	91.9	73	69.5
Currently using	48	14.8	8	10.7	24	8.1	32	30.5
	$X^2 = 0.852$ $p > 0.05$				$X^2 = 32.101$ $p < 0.001$			
<b>Substance Use</b>								

Do not use	324	99.7	75	100.0	294	99.7	105	100.0
Currently using	1	0.3	0	0.0	1	0.3	0	0.0
	$X^2 = 0.231$			$p > 0.05$	$X^2 = 0.357$			$p > 0.05$

### **Linear Regression Analysis of Victimization and Perpetration of Dating Violence**

In the DV victimization model, the adjusted R-square was 0.560, indicating that the predictor variables accounted for 56.0% of the variability in the criterion. The participants' age, gender, education, residence until high school, exposure to parental violence, witnessing of violence between parents, and alcohol, cigarette, and marijuana use were not significant predictors in the DV victimization model ( $p > 0.05$ ). In the DV perpetration model summary, the adjusted R-square was 0.144, indicating that the predictor variables accounted for 14.4% of the variability in the criterion. Exposure to parental violence ( $B = 0.179$ ,  $p < 0.05$ ) and alcohol use ( $B = 0.209$ ,  $p < 0.05$ ) were found to be significant predictors in the DV perpetration model (see Table 4).



**Table 4. Results of Linear Regression Analysis of Dating Violence Victimization and Perpetration**

	Victimization*						Perpetration**					
	B	S D	$\beta$	t	95% CI	P valu e	B	S D	$\beta$	t	95% CI	P valu e
<b>Constant</b>	1.351	.449		3.006	.467 2.234	.003	.970	.474		2.048	.039 1.902	.041
Age	.006	.084	.004	.072	-.080 3	.943	.022	.036	.036	.627	.093	.531
Gender	-.014	.034	-.025	-.407	-.158 0	.684	.011	.088	.006	.127	-.162	.899
Place of residence	.039	.047	.047	.829	-.053 1	.407	.072	.049	.077	1.460	-.025	.145
Type of high school	-.040	.050	-.046	-.793	-.138 9	.428	.024	.053	.025	.457	-.080	.648
Exposure to violence by parents	.040	.073	.043	.556	.183 2	.578	.190	.077	.179	2.479	.039	.014***
Witnessing of violence between parents	.108	.059	.136	1.841	.007 4	.066	.093	.062	.103	1.490	.030	.137
Alcohol use	.032	.066	.028	.476	.162 9	.634	.265	.070	.209	3.790	.127	.001***
Smoking	.047	.041	.061	1.153	.128 3	.250	.024	.043	.028	.563	.110	.574
Substance use	.164	.098	.021	.411	.946 9	.681	.473	.119	.054	1.127	1.297	.260

\*F = .968; R = 0.749; R<sup>2</sup> = 0.560

\*\*F = 7.318; R = 0.380; R<sup>2</sup> = 0.144

\*\*\* P < 0.05

## **DISCUSSION**

This study examined the prevalence and predictors of DV victimization and perpetration among nursing and midwifery students. DV is a serious public health problem and can start in early adolescence and be a determinant of future violence (Machado, Martins, & Caridade, 2014). We found that DV was prevalent among the participants, and verbal and psychological violence were the most frequently experienced types of violence in dating relationships, while sexual violence was the least frequently experienced type of violence in dating relationships. These results of the research are consistent with the literature (Barreira et al., 2014; Boladale, Yetunde, Adesanmi, Olutayo, & Olanrewaju, 2015; Chan et al., 2008; Fernandez-Fuertes & Fuertes, 2010; Ferreira et al., 2014; Foshee, McNaughton Reyes, et al., 2015; Lehrer, Lehrer, & Zhao, 2009; Ohnishi et al., 2011; Shorey et al., 2015; Volpe et al., 2012; Zhang et al., 2016). Researchers have identified psychological violence as the most common type of bidirectional violence perpetration in dating relationships (Chan, 2012; Ferreira et al., 2014; Ohnishi et al., 2011; Toplu-Demirtas et al., 2013; Volpe et al., 2012; Zhang et al., 2016). Studies in the United States (Shorey, 2015) and Nigeria (Boladale, 2015) showed that psychological aggression was the most common form of DV (54.9% and 21.9%, respectively), while sexual aggression was the least common (24.3% and 1.6%, respectively) (Boladale et al., 2015; Shorey et al., 2015). A study in Turkey reported high rates of psychological aggression among women (85.2%) and men (75.6%) in dating relationships (Toplu-Demirtas et al., 2013). Our findings highlight the importance of preventing dating violence because psychological violence within dating relationships is regarded as a major determinant of physical violence in future relations (Machado et al., 2014). It is important to enrich student's awareness by adding content about violent behaviors in the nursing and midwifery curriculum.

The low rate of sexual violence in this study can largely be explained by social and cultural factors. First, in contrast to Western countries, issues related to sexuality continue to be taboo and are considered only within marriage in Turkish culture (Zeyneloglu, Kisa, & Yilmaz, 2013). Second, girl/boy dating relationships are not accepted by most conservative Turkish families, and these families hold a belief that if a girl and boy become friends in a romantic relationship, they may engage in sexual activity which can lead to honor killings due to loss of virginity in southeastern Turkey (Zeyneloglu et al., 2013). Consequently, students might have deliberately given misleading responses to questions related to experiences of sexual violence. Further qualitative studies needed to highlight and address sexual violence among nursing and midwifery students in a conservative societies.

Not surprisingly, we found that students who exposed to physical violence by parents and witnessed violence between parents experienced violence in current dating relationships. Regression analysis also supported that experiencing physical violence by parents was a significant predictor of DV perpetration. These results of the research are consistent with the literature (Chen, 2009; Foshee et al., 2010; Lehrer et al., 2009). According to social control theory, people learn violent behaviors by observing or modelling such acts by parents and other surrounding people (Riggs & O'Leary, 1989). Nursing and midwifery students usually come from patriarchal families with low socioeconomic status. In these families, physical punishment is usually accepted as a disciplinary practice in childrearing. Family violence has been found to be a major risk for DV victimization among rural adolescents (Foshee et al., 2010). Chan et al. (2008) reported that students who experienced parental physical punishment and emotional abuse during childhood were more likely to be involved in DV (Chan et al., 2008). While witnessing violence between parents in childhood was a strong predictor for physical and psychological DV among girls (Haglund et al., 2012; Morris, Mrug, & Windle, 2015),

experiencing violence by parents and witnessing violence between parents predicted perpetration of physical dating abuse by boys (O'Donnell et al., 2006).

It was also found that as the students' age increased, the victimization and perpetration of violence decreased. Other studies examining the association between age and violence victimization and perpetration have produced inconsistent results. Some studies found that as age increased, violence decreased (Ferreira et al., 2014), whereas others reported that there was no association with age (Collibee & Furman, 2016) or that as age increased, the rate of violence victimization increased (Eaton, Davis, Barrios, Brener, & Noonan, 2007). Future research with larger samples is needed to examine the effect of age on DV.

This study found no significant relationships of DV with gender, place of residence, or smoking or heroin use. These findings are inconsistent with other studies showing that gender differences and marijuana use, in particular, were associated with all types of DV (Novak & Furman, 2016; Reyes et al., 2015). Moreover, some studies reported that women were more likely than men to report perpetrating physical and psychological violence against their partners (Chan, 2012; O'Leary et al., 2008), while men were more likely to report being victims (Barreira, Lima, & Avanci, 2013; Hautala, Sittner Hartshorn, Armenta, & Whitbeck, 2017; Novak & Furman, 2016). Other studies, though, indicated that girls were more likely to experience higher levels of DV victimization, including sexual and physical assault (Reyes et al., 2015). Some researchers also found a relationship between marijuana use and DV (Novak & Furman, 2016; Reyes et al., 2015), but in our study, almost none of the participants used any substance. Future studies using large samples with an equal gender distribution, therefore, are needed to determine the associations of DV with gender and marijuana use in Turkey.

The alcohol consumption rate was low (9.7%) among 15–29 year olds in Turkey (Üner, Balcılar, & Ergüder, 2018). As expected, in this study, we found a very low number of students using alcohol but also a significant relationship between alcohol use and violence perpetration.

This result is consistent with the literature (Baker, 2016; East & Hokoda, 2015). Reyes (2014) found that heavy alcohol use was associated with increased risk for physical dating abuse during adolescence due to negative impacts on cognitive functions and perceptual cues (Reyes et al., 2015). A study on the relationship between alcohol use and the perpetration of DV by male college students found that alcohol use was related to all types of aggression and that hazardous drinkers were at greater risk for perpetrating violence (Shorey et al., 2015). Regression analysis also supported that alcohol use was a strong predictor for perpetrating violence in dating relationships.

We found that the students did not perceive as violent some acts in dating relationships characterized as such in the literature (e.g., pinching, ridiculing, being jealous, yelling, controlling another's behavior, and restricting another's social life). The majority of the students did not regard as violent yelling, which was found to be the most common act in dating relationships. Behaviors such as jealousy, controlling behavior, restricting another's social life, and unwanted touching were seen as the least violent. The literature reports similar results (Aslan et al., 2008; Haglund et al., 2012; Khubchandani, Telljohann, Price, Dake, & Hendershot, 2013). An Australian report found that nonphysical behaviors, such as controlling a partner's social life, yelling loudly, and controlling another's life by denying financial support, were not recognized as violence in dating relationships (VicHealth, 2010). In a qualitative study, Mexican-American adolescents accepted and recognized jealousy as a sign of love, and controlling behavior toward female partners was accepted as normal among males who lived in traditional, conservative environments (Haglund et al., 2012). Violent behaviors start with jealousy in dating relationships, then continues into controlling and restricting another's social life, and eventually ends with violence (Catalozzi, Simon, Davidson, Breitbart, & Rickert, 2011). Even though, psychological and verbal violence are common among this group of students, we found that majority of the psychological and verbal acts are not recognized as

violent behaviors by the participating students. This result suggests that adding content about DV to nursing and midwifery programs and developing awareness strategies to aid recognition of violent behaviors are crucial steps in the struggle to prevent future violence.

Although the majority of the students perceived the act of forced sexual intercourse as violence, one in four students did not see it as violence. We found similar results in the literature (Aslan et al., 2008; Ozaki & Otis, 2016). A study on 12 countries with different cultures reported that 84% of Armenian students saw forced sexual contact as unacceptable behavior, while 100% of students from Egypt, India, and Scotland thought it was unacceptable behavior in dating relationships (Sheridan, Scott, Archer, & Roberts, 2017). However, a focus group study supported the conclusion that forced sex was not perceived as violent behavior but was accepted as a way of showing love to partners in dating relationships (Noel, Ogle, Maisto, & Jackson, 2016). Due to the sensitive nature of these issues, though, it is thought that the participating students in the present study might not have honestly answered the sexuality-related items.

### **Limitations**

There are several limitations to this study. First, the convenience sample of students recruited from one university setting might not have accurately represented nursing and midwifery students. Second, the self-report measures were subject to response biases, such as social desirability bias. In southeastern Turkey, some issues, such as alcohol use, girl/boy dating, and sexuality, remain taboo and socially unacceptable. The culture-bound, sensitive nature of the topic may have discouraged students from responding honestly to questions on alcohol and drug use and sexual violence. Third, this study was conducted with nursing and midwifery students who were more likely to be female because men are not accepted into midwifery programs and have been accepted in nursing programs in Turkey only since 2007, which may have led to

gender bias in this study. To avoid gender bias, therefore, future research on DV among nursing and midwifery students should include an equal number of participants of both genders.

## **CONCLUSION**

Efforts to reduce and stop DV have a crucial role in preventing future violence in established relationships. We acknowledge that the prevalence of dating violence among nursing and midwifery students are high. Acts related to psychological and verbal violence are extremely common and majority are not recognized as violent behaviors by the students. Therefore, the knowledge of the students, who are future role models in society, should be enriched by adding DV-related content, skills, and training to the curriculum of nursing and midwifery education that emphasizes healthy relationship. Activities such as social support groups where students can share their experiences about violent behaviors, need to be established to develop affective skills and self-confidence at identifying and reacting to DV among nursing and midwifery students. Nursing and midwifery schools need to establish clear policies and guidelines to address dating violence to help students. This study also highlights the importance of identifying suitable interventions that can be facilitated in developing healthy relationship for students who have child exposure to parental violence and alcohol use. Regarding institutional awareness, university administrators should establish policies and programs to encourage students to report all types of DV, and to eventually eliminate DV in the college environment. Further studies with larger samples with an equal gender distribution should be conducted to determine the associations of DV with gender roles, marijuana use, family characteristics, and the nature of nursing and midwifery college education.

## References

- Aslan, D., Vefikuluçay, D., Zeyneloğlu, S., Erdost, T., & Temel, F. (2008). *Ankara'da iki Hemşirelik Yüksekokulu'nun birinci ve dördüncü sınıflarında okuyan öğrencilerin flört şiddetine maruz kalma, flört ilişkilerinde şiddet uygulama durumlarının ve bu konudaki görüşlerinin saptanması araştırması [Investigation of the views and prevalence of dating violence victimization and perpetration among freshmen and seniors in two schools of nursing in Ankara]*. Retrieved from Ankara
- Baker, C. K. (2016). Dating Violence and Substance Use: Exploring the Context of Adolescent Relationships. *J Interpers Violence, 31*(5), 900-919. doi:10.1177/0886260514556768
- Banyard, V. L., & Cross, C. (2008). Consequences of teen dating violence: understanding intervening variables in ecological context. *Violence Against Women, 14*(9), 998-1013. doi:10.1177/1077801208322058
- Barreira, A. K., de Lima, M. L., Bigras, M., Njaine, K., & Assis, S. G. (2014). Directionality of physical and psychological dating violence among adolescents in Recife, Brazil. *Rev Bras Epidemiol, 17*(1), 217-228.
- Barreira, A. K., Lima, M. L., & Avanci, J. Q. (2013). [Co-occurrence of physical and psychological violence among dating adolescents in Recife, Brazil: prevalence and associated factors]. *Cien Saude Colet, 18*(1), 233-243.
- Beccaria, G., Beccaria, L., Dawson, R., Gorman, D., Harris, J. A., & Hossain, D. (2013). Nursing student's perceptions and understanding of intimate partner violence. *Nurse Educ Today, 33*(8), 907-911. doi:10.1016/j.nedt.2012.08.004
- Boladale, M., Yetunde, O., Adesanmi, A., Olutayo, A., & Olanrewaju, I. (2015). Personality profiles and psychopathology among students exposed to dating violence at the Obafemi Awolowo University, Ile-Ife. *J Interpers Violence, 30*(1), 168-190. doi:10.1177/0886260514532718
- Catalozzi, M., Simon, P. J., Davidson, L. L., Breitbart, V., & Rickert, V. I. (2011). Understanding control in adolescent and young adult relationships. *Arch Pediatr Adolesc Med, 165*(4), 313-319. doi:10.1001/archpediatrics.2011.32
- Chan, K. L. (2012). The role of Chinese face in the perpetration of dating partner violence. *J Interpers Violence, 27*(4), 793-811. doi:10.1177/0886260511423242
- Chan, K. L., Straus, M. A., Brownridge, D. A., Tiwari, A., & Leung, W. C. (2008). Prevalence of dating partner violence and suicidal ideation among male and female university students worldwide. *J Midwifery Womens Health, 53*(6), 529-537. doi:10.1016/j.jmwh.2008.04.016
- Chen, J. Q. (2009). [Study on 'dating violence' in 697 male university students]. *Zhonghua Liu Xing Bing Xue Za Zhi, 30*(10), 1013-1016.
- Collibee, C., & Furman, W. (2016). Chronic and Acute Relational Risk Factors for Dating Aggression in Adolescence and Young Adulthood. *J Youth Adolesc, 45*(4), 763-776. doi:10.1007/s10964-016-0427-0
- Dalfo-Pibernat, A., & Feijoo-Cid, M. (2017). Dating violence is an important issue in nursing education. *Int Nurs Rev. doi:10.1111/inr.12372*
- DGSW. (2009). *Türkiye'de kadına Yonelik Aile İci Siddet Arastirmasi*. Retrieved from Ankara, Turkey: <https://kadininstatusu.aile.gov.tr/kadina-yonelik-aile-ici-siddet-arastirmasi>
- East, P. L., & Hokoda, A. (2015). Risk and protective factors for sexual and dating violence victimization: a longitudinal, prospective study of Latino and African American adolescents. *J Youth Adolesc, 44*(6), 1288-1300. doi:10.1007/s10964-015-0273-5
- Eaton, D. K., Davis, K. S., Barrios, L., Brener, N. D., & Noonan, R. K. (2007). Associations of dating violence victimization with lifetime participation, co-occurrence, and early initiation of risk behaviors among U.S. high school students. *J Interpers Violence, 22*(5), 585-602. doi:10.1177/0886260506298831



- Fernandez-Fuertes, A. A., & Fuertes, A. (2010). Physical and psychological aggression in dating relationships of Spanish adolescents: motives and consequences. *Child Abuse Negl*, 34(3), 183-191. doi:10.1016/j.chiabu.2010.01.002
- Ferreira, M., Lopes, A., Aparicio, G., Cabral, L., & Duarte, J. (2014). Teens and dating: study of factors that influence attitudes of violence. *Aten Primaria*, 46 Suppl 5, 187-190. doi:10.1016/s0212-6567(14)70089-7
- Foshee, V. A., Chang, L. Y., McNaughton Reyes, H. L., Chen, M. S., & Ennett, S. T. (2015). The Synergy of Family and Neighborhood on Rural Dating Violence Victimization. *Am J Prev Med*, 49(3), 483-491. doi:10.1016/j.amepre.2015.06.005
- Foshee, V. A., McNaughton Reyes, L., Tharp, A. T., Chang, L. Y., Ennett, S. T., Simon, T. R., . . . Suchindran, C. (2015). Shared longitudinal predictors of physical peer and dating violence. *J Adolesc Health*, 56(1), 106-112. doi:10.1016/j.jadohealth.2014.08.003
- Foshee, V. A., Reyes, H. L., & Ennett, S. T. (2010). Examination of Sex and Race Differences in Longitudinal Predictors of the Initiation of Adolescent Dating Violence Perpetration. *J Aggress Maltreat Trauma*, 19(5), 492-516. doi:10.1080/10926771.2010.495032
- Freedberg, P. (2008). Integrating forensic nursing into the undergraduate nursing curriculum: A solution for a disconnect. *Journal of Nursing Education*, 47(5), 201-208. doi:10.3928/01484834-20080501-05
- Garcia Diaz, V., Fernandez Feito, A., Rodriguez Diaz, F. J., Lopez Gonzalez, M. L., Mosteiro Diaz Mdel, P., & Lana Perez, A. (2013). [Gender violence in nursing students during their dating relationships]. *Aten Primaria*, 45(6), 290-296. doi:10.1016/j.aprim.2012.11.013
- Gressard, L. A., Swahn, M. H., & Tharp, A. T. (2015). A First Look at Gender Inequality as a Societal Risk Factor for Dating Violence. *Am J Prev Med*, 49(3), 448-457. doi:10.1016/j.amepre.2015.05.017
- Haglund, K., Belknap, R. A., & Garcia, J. T. (2012). Mexican American female adolescents' perceptions of relationships and dating violence. *J Nurs Scholarsh*, 44(3), 215-222. doi:10.1111/j.1547-5069.2012.01452.x
- Hautala, D. S., Sittner Hartshorn, K. J., Armenta, B., & Whitbeck, L. (2017). Prevalence and Correlates of Physical Dating Violence among North American Indigenous Adolescents. *Youth Soc*, 49(3), 295-317. doi:10.1177/0044118x14559503
- Kalra, G., & Bhugra, D. (2013). Sexual violence against women: Understanding cross-cultural intersections. *Indian Journal of Psychiatry*, 55(3), 244-249. doi:10.4103/0019-5545.117139
- Khubchandani, J., Telljohann, S. K., Price, J. H., Dake, J. A., & Hendershot, C. (2013). Providing assistance to the victims of adolescent dating violence: a national assessment of school nurses' practices. *J Sch Health*, 83(2), 127-136. doi:10.1111/josh.12008
- Latzman, N. E., Vivolo-Kantor, A. M., Holditch Niolon, P., & Ghazarian, S. R. (2015). Predicting Adolescent Dating Violence Perpetration: Role of Exposure to Intimate Partner Violence and Parenting Practices. *Am J Prev Med*, 49(3), 476-482. doi:10.1016/j.amepre.2015.06.006
- Lehrer, J. A., Lehrer, E. L., & Koss, M. P. (2013). Sexual and dating violence among adolescents and young adults in Chile: a review of findings from a survey of university students. *Cult Health Sex*, 15(1), 1-14. doi:10.1080/13691058.2012.737934
- Lehrer, J. A., Lehrer, E. L., & Zhao, Z. (2009). Physical and psychological dating violence in young men and women in Chile: results from a 2005 survey of university students. *Int J Inj Contr Saf Promot*, 16(4), 205-214. doi:10.1080/17457300903307003
- Machado, C., Martins, C., & Caridade, S. (2014). Violence in Intimate Relationships: A Comparison between Married and Dating Couples. *Journal of Criminology*, 2014, 9. doi:10.1155/2014/897093

- Miller, E. (2017). Prevention of and Interventions for Dating and Sexual Violence in Adolescence. *Pediatr Clin North Am*, 64(2), 423-434. doi:10.1016/j.pcl.2016.11.010
- Morris, A. M., Mrug, S., & Windle, M. (2015). From Family Violence to Dating Violence: Testing a Dual Pathway Model. *J Youth Adolesc*, 44(9), 1819-1835. doi:10.1007/s10964-015-0328-7
- Noel, N. E., Ogle, R. L., Maisto, S. A., & Jackson, L. A., Jr. (2016). What Do Women Want? A Qualitative Study of Dating. *Violence Against Women*, 22(2), 168-188. doi:10.1177/1077801214555472
- Novak, J., & Furman, W. (2016). Partner Violence During Adolescence and Young Adulthood: Individual and Relationship Level Risk Factors. *J Youth Adolesc*, 45(9), 1849-1861. doi:10.1007/s10964-016-0484-4
- O'Leary, K. D., Smith Slep, A. M., Avery-Leaf, S., & Cascardi, M. (2008). Gender differences in dating aggression among multiethnic high school students. *J Adolesc Health*, 42(5), 473-479. doi:10.1016/j.jadohealth.2007.09.012
- O'Donnell, L., Stueve, A., Myint-U, A., Duran, R., Agronick, G., & Wilson-Simmons, R. (2006). Middle school aggression and subsequent intimate partner physical violence. *J Youth Adolesc*, 25, 693-703.
- Ohnishi, M., Nakao, R., Shibayama, S., Matsuyama, Y., Oishi, K., & Miyahara, H. (2011). Knowledge, experience, and potential risks of dating violence among Japanese university students: a cross-sectional study. *BMC Public Health*, 11, 339. doi:10.1186/1471-2458-11-339
- Orhon, F. S., Ulukol, B., Bingoler, B., & Gulnar, S. B. (2006). Attitudes of Turkish parents, pediatric residents, and medical students toward child disciplinary practices. *Child Abuse Negl*, 30(10), 1081-1092. doi:10.1016/j.chiabu.2006.04.004
- Ozaki, R., & Otis, M. D. (2016). Gender Equality, Patriarchal Cultural Norms, and Perpetration of Intimate Partner Violence: Comparison of Male University Students in Asian and European Cultural Contexts. *Violence Against Women*. doi:10.1177/1077801216654575
- Reyes, H. L., Foshee, V. A., Tharp, A. T., Ennett, S. T., & Bauer, D. J. (2015). Substance Use and Physical Dating Violence: The Role of Contextual Moderators. *Am J Prev Med*, 49(3), 467-475. doi:10.1016/j.amepre.2015.05.018
- Riggs, D. S., & O'Leary, K. (1989). *A theoretical model of courtship aggression*. In: Pirog-Good MA, Stets JE, editors. *Violence in dating relationships: Emerging social issues*.: New York: Praeger
- Rothman, E. F., Bair-Merritt, M. H., & Tharp, A. T. (2015). Beyond the Individual Level: Novel Approaches and Considerations for Multilevel Adolescent Dating Violence Prevention. *Am J Prev Med*, 49(3), 445-447. doi:10.1016/j.amepre.2015.05.019
- Sheridan, L., Scott, A. J., Archer, J., & Roberts, K. (2017). Female undergraduate's perceptions of intrusive behavior in 12 countries. *Aggress Behav*. doi:10.1002/ab.21711
- Shorey, R. C., Brasfield, H., Zapor, H. Z., Febres, J., & Stuart, G. L. (2015). The relation between alcohol use and psychological, physical, and sexual dating violence perpetration among male college students. *Violence Against Women*, 21(2), 151-164. doi:10.1177/1077801214564689
- Toplu-Demirtas, E., Hatipoglu-Sümer, Z., & White, J. W. (2013). The Relation Between Dating Violence Victimization and Commitment Among Turkish College Women: Does the Investment Model Matter? *IJCV*, 7 (2), 203 – 215.
- Vagi, K. J., O'Malley Olsen, E., Basile, K. C., & Vivolo-Kantor, A. M. (2015). Teen Dating Violence (Physical and Sexual) Among US High School Students: Findings From the 2013 National Youth Risk Behavior Survey. *JAMA Pediatr*, 169(5), 474-482. doi:10.1001/jamapediatrics.2014.3577

- VicHealth. (2010). *National Survey on Community Attitudes to Violence Against Women 2009. Changing cultures, changing attitudes – preventing violence against women*. Retrieved from <http://www.vichealth.vic.gov.au>
- Volpe, E. M., Hardie, T. L., & Cerulli, C. (2012). Associations among depressive symptoms, dating violence, and relationship power in urban, adolescent girls. *J Obstet Gynecol Neonatal Nurs*, *41*(4), 506-518. doi:10.1111/j.1552-6909.2012.01384.x
- Üner, S., Balcılar, M., & Ergüder, T. (2018). *Türkiye Hanehalkı Sağlık Araştırması: Bulaşıcı Olmayan Hastalıkların Risk Faktörleri Prevalansı 2017 (STEPS)*. Retrieved from Ankara: (<http://www.euro.who.int/>
- Zeyneloğlu, S., Kisa, S., & Yılmaz, D. (2013). Turkish nursing students' knowledge and perceptions regarding virginity. *Nurse Educ Today*, *33*(2), 110-115. doi:10.1016/j.nedt.2012.01.016
- Zhang, H., Wong, W. C., Ip, P., Lai, G. W., Lam, T. H., Lam, K. F., . . . Yip, P. S. (2016). A Study of Violence Among Hong Kong Young Adults and Associated Substance Use, Risky Sexual Behaviors, and Pregnancy. *Violence Vict*, *31*(5), 985-996. doi:10.1891/0886-6708.vv-d-13-00181