

# Students' Use of the Internet for Sexuality and its Effect on Sexual Attitude and Exposure to Sexual Cyber Aggression: Descriptive and Cross-Sectional Research

## Öğrencilerin İnterneti Cinselliğe Yönelik Kullanımı ve Bunun Cinsel Tutum ve Cinsel Siber Saldırıya Maruz Kalma Üzerine Etkisi: Tanımlayıcı ve Kesitsel Araştırma

<sup>id</sup> Aynur KIZILIRMAK<sup>a</sup>, <sup>id</sup> Mehtap SÖNMEZ<sup>b</sup>, <sup>id</sup> Gülçin NACAR<sup>c</sup>, <sup>id</sup> Sermin TİMUR TAŞHAN<sup>c</sup>

<sup>a</sup>Department of Obstetrics and Gynecology Nursing, Nevşehir Hacı Bektaş Veli University Semra and Vefa Küçük Faculty of Health Sciences, Nevşehir, Türkiye

<sup>b</sup>Department of Public Health Nursing, Kahramanmaraş Sütçü İmam University Faculty of Health Sciences, Kahramanmaraş, Türkiye

<sup>c</sup>Department of Obstetrics and Gynecology Nursing, İnönü University Faculty of Nursing, Malatya, Türkiye

**ABSTRACT Objective:** This research aims to determine the students' usage of the internet for sexuality and its effect on the exposure to sexual cyber aggression and their sexual attitudes. **Material and Methods:** This descriptive cross-sectional study was conducted with 605 nursing students from two different universities. The study was conducted between February 2018 and June 2019. The data were collected using participant information form, which was prepared by researchers, the Hendrick Sexual Attitudes Scale, and Cyber Aggression in Relationships Scale. While making statistical evaluation, percentage distribution, arithmetic mean, standard deviation, chi-square, Cronbach Alpha reliability analysis and backward stepwise logistic regression analysis were used. **Results:** In the study, 33.4% of the students use the internet to learn about sexuality, 14.5% of the students stated that they were exposed to sexual cyber aggression. Besides, the students who were exposed to sexual cyber aggression were found to have more negative sexual attitudes and carried out more cyber aggression in their relationships ( $p<0.05$ ). As a result of the backward stepwise logistic regression analysis made in the study, it was found that women were exposed to sexual cyber aggression 4.19 times more, while those who chat sexual topics through the internet 5.95 times more ( $p<0.05$ ). **Conclusion:** A significant number of students use the internet to search for sexual topics and they were exposed to sexual cyber aggressions. It was found that exposed to sexual cyber aggression developed more negative sexual attitudes and perpetrated more cyber aggression in relationships.

**Keywords:** Sexuality; sexual cyber aggression; sexual attitude; internet; student

**ÖZET Amaç:** Araştırma, öğrencilerin interneti cinselliğe yönelik kullanımı ve bunun cinsel siber saldırıya maruz kalma ve cinsel tutum üzerine etkisini belirlemek amacıyla yapılmıştır. **Gereç ve Yöntemler:** Araştırma, tanımlayıcı kesitsel özelliktedir. Araştırmanın örneklemini, 2 kamu üniversitesinin hemşirelik bölümüne kayıtlı olan 605 öğrenci oluşturmuştur. Araştırma, Şubat 2018-Haziran 2019 tarihleri arasında yapılmıştır. Araştırma verileri; araştırmacılar tarafından oluşturulan kişisel bilgi formu, Hendrick Cinsel Tutum Ölçeği ve Partner Siber Saldırılanlık Ölçeği kullanılarak toplanmıştır. İstatistiksel değerlendirmede; yüzdeler dağılımı, aritmetik ortalama, standart sapma, ki-kare testi, Cronbach alfa güvenilirlik analizi ve "backward stepwise lojistik regresyon analizi" testi kullanılmıştır. **Bulgular:** Araştırmada öğrencilerin %33,4'ü çevrim içi olarak cinsellikle ilgili bilgi edindiğini ve %14,5'i siber cinsel saldırıya maruz kaldığını belirtmiştir. Ayrıca siber cinsel saldırıya maruz kalan öğrencilerin daha olumsuz cinsel tutuma sahip olduğu ve daha fazla partner siber saldırı uyguladığı saptanmıştır ( $p<0,05$ ). Araştırmada yapılan "backward stepwise lojistik regresyon analizi" sonucunda; kadınların 4,19 kat ve internet üzerinden cinsellik içerikli sohbet etmek isteyenlerin 5,95 kat daha fazla cinsel siber saldırıya maruz kalma riskinin olduğu saptanmıştır ( $p<0,05$ ). **Sonuç:** Sonuç olarak öğrencilerin önemli bir kısmının cinsellikle ilgili bilgi edinmek için interneti kullandıkları ve siber cinsel saldırıya maruz kaldıkları belirlenmiştir. Siber cinsel saldırıya maruz kalan öğrencilerin daha olumsuz cinsel tutum geliştirdiği ve daha fazla partner siber saldırı uyguladığı saptanmıştır.

**Anahtar Kelimeler:** Cinsellik; cinsel siber saldırı; cinsel tutum; internet; öğrenci

**Correspondence:** Gülçin NACAR

Department of Obstetrics and Gynecology Nursing, İnönü University Faculty of Nursing, Malatya, Türkiye

**E-mail:** gulcin.nacar@gmail.com



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The internet is an easy-to-access, useful tool that allows connection any time of the day and has an important place in our daily life. Thanks to these features, the internet has become a means of socialization, entertainment, and of searching for essential information in our lives.<sup>1</sup> Young people use the internet for numerous activities such as contacting others, establishing social relationships with friends, following the activities of others, participating several meetings, shopping, as well as searching for information.<sup>2</sup>

Young people, sometimes, use the internet to search for matters that arouse curiosity as they cannot be easily discussed in the society. One of these matters, sexuality, is a subject that is commonly researched on the internet.<sup>3</sup> Studies have shown that the prevalence of young people's use of internet for sexuality is high.<sup>3</sup> In a study, it was reported that 21% of the women and 23% of the men in the age group 18-24 years have watched pornography on the internet to learn about sexuality.<sup>4</sup> In another study, more than half of the participants stated that they use the internet to learn about sexual matters.<sup>5</sup> Using the internet for sexuality encompasses matters such as sexual entertainment, searching for solutions to sexual problems and concerns, buying online sexual materials, searching for sexual partners, sexual arousal, viewing, downloading or sharing sexual material, and discussing sexual matters with others.<sup>3</sup>

In addition to its numerous advantages, with its common use on such a scale, the internet has also led the concept of cyberstalking to be emerged. The use of the internet, or other electronic means, by an individual or group to harass and intimidate a selected victim is defined as cyberstalking. Acts such as sending disturbing text messages, sharing someone else's private information or image in a virtual environment, online intimidation, abuse, bullying, humiliation can be given as some examples of cyberstalking.<sup>6</sup> Sexual cyberstalking, on the other hand, is to perpetrate the aforementioned stalking acts in the sexual activities dimension.<sup>7</sup> Henry and Powell reported that the rate of sexual cyber aggression among adolescents varies between 5.6-68.3%.<sup>8</sup> Bossler et al. stated that 44% of the adolescent women and 26% of the adolescent men were exposed to sexual cyber aggression.<sup>9</sup>

It has been reported that exposure to sexual cyber aggression was positively related to sexual attitudes disorders regarding risky sexual behavior such as unprotected sex, having multiple sex partners, etc.<sup>10</sup> Studies have shown that exposure to sexual cyber aggression leads to sexual and mental disorders and it is also associated with cyber aggression in relationships as well.<sup>7,11</sup> In this sense, important responsibilities fall to healthcare professionals for the society to keep a healthy sex life and to protect them from the negative effects of sexual problems they face. One of these responsibilities is to determine the sexuality-related outcomes arising from the internet use and the effects of these outcomes on sexual health. Based on this, this research was carried out to determine the students' usage of the internet for sexuality and its effect on the exposure to sexual cyber aggression and their sexual attitudes.

## MATERIAL AND METHODS

### DESIGN

This is a descriptive and cross-sectional study.

### SAMPLE

The study was conducted between February 2018 and June 2019. The research population consists of 838 students who study at the department of nursing, faculty of health sciences of two public universities. No sampling method was used in the study and 605 students who agreed to participate in the study formed the sampling. 72% of the population was reached in the study. The inclusion criterion in the study was to continue his/her nursing education actively. The student profiles of both universities consist of those living in the university region in general and their socio-demographic characteristics were similar.

### DATA COLLECTION AND DATA COLLECTION TOOLS

The data were collected in the classroom environment by the researchers, and the students were asked to mark the forms. The students were asked to put the forms they marked in the envelopes given by the researchers, they were also informed that if they wish,

they could fill the forms later on and submit to the researchers. It took about 10-15 minutes to fill in the data collection tools. The data were collected using participant information form, which was prepared by researchers, the Hendrick Sexual Attitudes Scale (HSAS), and Cyber Aggression in Relationships Scale (CARS).

#### PARTICIPANT INFORMATION FORM

This form consists of questions regarding the students' introductory characteristics (age, educational level, marital status, level of income) and their use of the internet for sexual matters, and exposure to sexual cyber aggression.<sup>8,11</sup> Status of students being exposed to sexual cyber aggression, "Have you been exposed to sexually explicit images, messages, conversations, stalking, blackmail or harassment of the person(s) via mobile phone or internet in the last six months?" obtained with the question.

#### HSAS

The scale which was prepared by Hendrick and Hendrick was adopted into Turkish by Karaçam et al. This 23-item scale consists of four subscales: permissiveness (items 1-10), birth control (items 11-13), communion (items 14-18), and instrumentality (items 19-23). Each item is scored between 1-5 points. The items of birth control and communion subscales were reverse coded. Higher score indicates that individual engages with ideal, healthy, and balanced sexual attitude while lower score shows that individual engages with self-centered sexual life, and being away from an ideal sexual attitude.<sup>12,13</sup>

Karaçam et al. reported Cronbach alpha coefficient as 0.86 for permissiveness, 0.84 for birth control, 0.66 for communion, and 0.69 for instrumentality subscales.<sup>12</sup> In this study, we found Cronbach alpha coefficient as 0.82 for permissiveness, 0.91 for birth control, 0.87 for communion, and 0.89 for instrumentality subscales.

#### CARS

This scale, developed by Watkins et al., evaluates cyber aggression carried out by adults to their partners or by partners to themselves, bidirectionally.<sup>14</sup> Turkish validity and reliability study of the scale was

performed by Nacar et al.<sup>15</sup> The scale consists of 30 items, including 15 for cyber aggression and 15 for cyber victimization. In this study, cyber aggression part of the scale was used. For this reason, items "a" of the scale were used in the research. Cyber aggression dimension of the scale consists of two subscales: psychological/sexual cyber aggression and stalking cyber aggression. Psychological/sexual cyber aggression contains items 1, 3, 4, 7, 8, 10, 11, 14, and 15, while cyber stalking cyber aggression subscale encompasses items 2, 5, 6, 9, 12, and 13. Participants rate items on a 7-point scale ranging from 0 to 7 (0=never, 1=once in the past 6 months, 2=twice in the past 6 months, 3=3-5 times in the past 6 months, 4=6-10 times in the past 6 months, 5=11-20 times in the past 6 months, 6=more than 20 times in the past 6 months, 7=not in the past 6 months, but it did happen before). The lowest and highest scores to be taken from the scale is 0 and 119, respectively. Higher scores indicate higher levels of cyber aggression carried out by individual to his/her partner. The scale has no cutoff points. Nacar et al. reported that the Cronbach alpha coefficient of the scale was 0.90.<sup>15</sup> Cronbach alpha coefficient of the scale was found as 0.93 in this study.

#### DATA ANALYSIS

The data were analyzed using IBM SPSS 20.0 (IBM Corp, Chicago, Illinois, USA). While making statistical evaluation, percentage distribution, arithmetic mean, standard deviation, chi-square, Cronbach alpha reliability analysis and backward stepwise logistic regression analysis were used. Results were evaluated at 95% confidence interval and significance level was  $p < 0.05$ .

#### ETHICAL APPROVAL

The research was conducted in accordance with the Principles of the Declaration of Helsinki. Ethical approval (date: March 12, 2018, no: 2018/06) was obtained from the Kahramanmaraş Sütçü İmam University prior to study. Besides, written permission was obtained from both universities where the study was to be conducted, and written and verbal consent was obtained from the students who participated in the study.

## RESULTS

Of the students; 80.7% were aged 20 years and over, 76.9% were female, 57.4% had an equal income-expenditure level, and 91.1% were single. It was found in the study that 14.5% of the students were exposed to sexual cyber aggression (Table 1). Comparing students' socio-demographic characteristics and exposure to sexual cyber aggression, it was observed that 16.6% of female students and 7.9% of male students were exposed to sexual cyber aggression ( $p<0.005$ ). No significant relationship was found between exposure to sexual cyber aggression and variables age, income, and marital status ( $p>0.05$ ).

In the study, it was found that 33.4% of the students use the internet to learn about sexuality and the most frequently searched topics were virtual sexual intercourse (14.5%) and hymen (12.4%), respectively. Students were found to use the internet for searching for sexual partners (36.9%), chatting sexual topics (21.8%), and viewing erotic and pornographic videos/films (9.6%). The students stated that they access erotic and pornographic photos, videos, and

films via WhatsApp (Meta, Inc., USA) (4.8%), social media (11.1%), and e-mail (4.6%) (Table 2).

In the study, it was determined that the students, who use the internet for learning about sexuality, searching for sexual partners, and viewing erotic and pornographic films and videos and who chat sexual topics, were exposed to sexual cyber aggression more ( $p<0.05$ ; Table 2).

In the study, it was observed that 41.4% of those who access erotic and pornographic photos, videos, and films via WhatsApp, 35.8% of those who access erotic and pornographic photos, videos, and films via social media accounts, and 42.9% of those who access erotic and pornographic photos, videos, and films via e-mail were exposed to sexual cyber aggression ( $p<0.05$ ; Table 2).

In the study, it was observed that the students who were exposed to sexual cyber aggression developed more negative sexual attitudes compared to those who were not exposed ( $p<0.05$ ). Besides, it was seen that the students who were exposed to sexual cyber aggression carried out more cyber aggression (which was determined using CARS) to their partners compared to those who were not exposed ( $p<0.05$ ; Table 3).

As a result of the backward stepwise logistic regression analysis made in the study, it was found that women were exposed to sexual cyber aggression 4.19 times more, while those who chat sexual topics through the internet 5.95 times more ( $p<0.05$ ; Table 4).

## DISCUSSION

Youth is a period when sexual topics are searched more.<sup>16</sup> Sexuality, however, is not an acceptable topic for conversation in closed societies.<sup>17</sup> The internet, therefore, is commonly preferred by young people as it provides easy access to sexual matters.<sup>18</sup> Although the internet offers several advantages in terms of searching for sexual matters, it also brings some risks, too.<sup>19</sup> Sexual cyber aggression and/or victimization, cyber aggression in relationships and/or victimization, and developing negative sexual attitudes can be regarded among these risks.<sup>7-9,11</sup> The results of this study that examines the use of the internet by univer-

**TABLE 1:** Comparison of the students' exposure to sexual cyber aggression and their socio-demographic characteristics.

Socio-demographic characteristics	Exposure to sexual cyber aggression		
	Yes n (%)	No n (%)	Total n (%)
Age			
<20	18 (15.4)	99 (84.6)	117 (19.3)
≥20	70 (14.3)	418 (85.7)	488 (80.7)
X2/p	0.082/0.436		
Gender			
Female	77 (16.6)	388 (83.4)	465 (76.9)
Male	11 (7.9)	129 (92.1)	140 (23.1)
X2/p	6.555/0.006		
Income level			
My income is less than my expenses	26 (14.1)	159 (85.9)	185 (30.6)
My income and expenses are balanced	46 (13.3)	301 (86.7)	347 (57.4)
My income is more than my expenses	16 (21.9)	57 (78.1)	73 (12.0)
X2/p	3.692/0.158		
Marital status			
Married	11 (20.4)	43 (79.6)	54 (8.9)
Single	77 (14.0)	474 (86.0)	551 (91.1)
X2/p	1.619/0.143		
Total	88 (14.5)	517 (85.5)	605 (100.0)

**TABLE 2:** Distribution of students' exposure to sexual cyber aggression.

Reason to use the internet	Exposure sexual cyber aggression		Total n (%)
	Yes n (%)	No n (%)	
<b>The use of the internet for sexual matters# (n=515)</b>			
Yes	44 (25.6)	128 (74.4)	172 (33.4)
No	44 (12.8)	299 (87.2)	343 (66.6)
X <sup>2</sup> /p	13.151/0.000		
<b>The topics for which the internet is used to learn about sexuality*</b>			
To learn about hymen			75 (12.4)
Virtual sexual intercourse			88 (14.5)
To learn about sexual dysfunctions			16 (2.6)
To learn about oral sex			5 (0.8)
<b>The use of the internet for searching for sexual partners</b>			
Yes	42 (18.9)	180 (81.1)	222 (36.9)
No	45 (11.9)	334 (88.1)	381 (63.1)
X <sup>2</sup> /p	5.613/0.013		
<b>Chatting sexual topics through the internet</b>			
Yes	51 (38.6)	81 (61.4)	132 (21.8)
No	36 (7.7)	437 (92.3)	473 (78.2)
X <sup>2</sup> /p	79.570/0.000		
<b>The use of the internet to access erotic and pornographic films</b>			
Yes	14 (24.1)	44 (75.9)	58 (9.6)
No	74 (13.5)	473 (86.5)	547 (90.4)
X <sup>2</sup> /p	4.749/0.000		
<b>The way to access erotic and pornographic data (photos, videos, films) through the internet</b>			
<b>Via WhatsApp</b>			
Yes	12 (41.4)	17 (58.6)	42 (4.8)
No	76 (13.2)	500 (86.8)	576 (95.2)
X <sup>2</sup> /p	17.646/0.000		
<b>Via social media accounts</b>			
Yes	24 (35.8)	43 (64.2)	67 (11.1)
No	64 (11.9)	474 (88.1)	538 (88.9)
X <sup>2</sup> /p	27.437/0.000		
<b>Via e-mail</b>			
Yes	12 (42.9)	16 (57.1)	28 (4.6)
No	76 (13.2)	501 (86.8)	577 (95.4)
X <sup>2</sup> /p	18.932/0.000		

\*Multiple options were marked; #Only those who wanted to answer responded.

**TABLE 3:** Distribution of the mean scores of students who were exposed to sexual cyber aggression regarding the "Hendrick Sexual Attitudes Scale" and the "Cyber Aggression in Relationships Scale".

	Exposure to sexual cyber aggression		t/p
	Yes $\bar{X}\pm SD$	No $\bar{X}\pm SD$	
Hendrick Sexual Attitudes Scale	79.61±19.82	86.62±19.61	2.813/0.000
Cyber Aggression in Relationships Scale# (n=271)	23.59±16.62	17.45±11.51	7.701/0.004

#Only those who have a partner responded; SD: Standard deviation.

**TABLE 4:** Further analysis of risk factors associated with sexual cyber aggression victimization.\*

Risk factors	$\beta$	SE	df	p value	OR	95% CI
Gender (referent: men)						
Women	1.433	0.457	1	0.002	4.19	1.710-10.277
The use of the internet to learn about sexual matters (referent: no)						
Yes	0.366	0.28	1	0.198	1.44	0.826-2.517
The use of the internet to search for sexual partners (referent: no)						
Yes	-0.091	0.291	1	0.755	0.91	0.516-1.616
Chatting sexual topics through the internet (referent: no)						
Yes	1.783	0.309	1	0.001	5.95	3.246-10.910
The use of the internet to access erotic and pornographic films (referent: no)						
Yes	0.243	0.475	1	0.434	0.61	0.502-3.234
Receiving sexually explicit data via WhatsApp (referent: no)						
Yes	0.532	0.533	1	0.318	1.70	0.599-4.834
Receiving written/oral sexually explicit comments through social media accounts (referent: no)						
Yes	0.609	0.374	1	0.103	1.84	0.883-3.830
Receiving sexually explicit e-mail (referent: no)						
Yes	0.547	0.536	1	0.308	1.73	0.604-4.940

\*Backward stepwise logistic regression; SE: Standard error; df: Degree of freedom; OR: Odd's ratio; CI: Confidence interval.

sity students, exposure to sexual cyber aggression, and its effect on sexual attitudes were discussed in the light of the current literature.

In the study, it was determined that one-third of the students used the internet for learning sexual matters, and that the most frequently searched topics were hymen and virtual sexual intercourse, respectively. Students, besides, stated that they use the internet to search for sexual partners, to chat sexual topics, and to view sexually explicit videos and films. In their study carried out with university students, Döring et al. determined that the majority of the students used the internet for sexual topics, more than two-thirds of them bought sexual enhancers, almost half of them have looked on sexual materials, and one-third of them had virtual sex.<sup>20</sup> Gold et al. stated that more than half of the participants made search on sexual health using social media sites and that one-third of the participants who received information about sexual matters were young people.<sup>21</sup> Gutiérrez-Puertas et al. reported that half of the university students had virtual sex through chatting rooms, two-third of them use the chatting rooms for flirting, and more than two-third of them watch online erotic or pornographic film/video through the internet.<sup>3</sup> Regnerus et al. determined that 46% of men and 16%

of women between the ages of 18-39 years viewed pornography in a given week, while 56% of men and 26% of women in a given month, and 69% of men and 40% of women in a given year.<sup>22</sup> Klein and Cooper stated that more than one-fourth of university students sent pornographic photos to others, almost half of them visit pornographic internet sites, more than one-tenth of them joined the online sexual chats.<sup>23</sup> When compared to the studies of Gutiérrez-Puertas et al., Döring et al., Regnerus et al., Klein and Cooper and Gold et al, we observed that the students in our study use the internet less to search for sexual matters.<sup>3,20,22-24</sup> We think that this difference may be due to the fact that the population of our research consisted of nursing students. The fact that nursing students' curriculum already covers topics such as sexual health, sexually transmitted disease, etc. allows them to have information on these matters and thus, they use the internet less to learn about these topics. We think that another reason for this difference may be due to cultural differences. The way of discussing the sexuality of each culture, the meaning they give, and its place in society differ from each other.<sup>17</sup> In Turkish culture, sex life mostly begins with marriage and it is not considered appropriate to discuss sexual matters before marriage.<sup>25</sup>

In the study, the students stated that they receive sexually explicit photos, images, and videos through social media at most. Gold et al. reported that social networking sites such as Facebook (Meta, Inc., USA), MySpace (Viant Technology LLC, USA), and Twitter (Twitter, Inc., USA) are commonly being used for sexual health promotion.<sup>21</sup> Another study has shown that frequent use of social media increases sexual activities.<sup>26</sup> Our finding shows similarity to the findings of Gold et al. and Romo et al.<sup>21,26</sup>

In the study, it was found that about one-seventh of the students were exposed to sexual cyber aggression. In their study conducted with individuals aged between 18-60 years, Gámez-Guadix et al. stated that one-third of the participants were exposed to sexual cyber aggression.<sup>7</sup> Khine et al. identified that 44.2% of the university students were exposed to cyber aggression, including sexual cyber aggression.<sup>27</sup> Bergmann and Baier reported that 13.5% of the university students were exposed to sexual cyber aggression.<sup>28</sup> In another study carried out with students in the age group of 12-17 years, it was reported that about one-third of people who have an online romantic relationship were exposed to online sexual aggression.<sup>29</sup> Examining the results of the aforementioned study, while the prevalence of sexual cyber aggression suffered by students in our study were lower than the prevalence in the studies of Gámez-Guadix et al., Khine et al., and Hinduja and Patchin, it was higher than the prevalence in the study of Bergmann and Baier.<sup>7,27-29</sup> The reason for the difference is thought to arise from the difference in defining the action called sexual cyber aggression sometimes as aggression personally and hesitations of the person in responding to the questionnaire depending on the embarrassment he/she lives.

In the research, it was found that women were exposed to sexual cyber aggression 4.19 times more than men and 5.95 times more than those who did not join the sexual chatting rooms. Gámez-Guadix et al. reported that the being female and creating and providing online sexual content are among the most significant risk factors for exposure to sexual cyber aggression.<sup>7</sup> Khine et al. identified that being female and experiencing violence before was associated with an increased risk of being cyberbullying victims.<sup>27</sup>

Bergmann and Baier stated that females are more likely to engage in sexual cyber aggression.<sup>28</sup> Similarly, Rice et al. reported that female students were victimized more.<sup>30</sup> Pujazon-Zazik and Park underlined that young people who connect chatting rooms and make sexual chats were more likely to expose to sexual harassment.<sup>31</sup> When we examine the results of the abovementioned studies, the identified sexual cyber victimization risk factors were found to be similar to the findings of Gámez-Guadix et al., Khine et al., Bergmann and Baier, and Pujazon-Zazik and Park.<sup>7,27,28,31.</sup>

Those who were exposed to sexual cyber aggression may develop a negative sexual attitude.<sup>11</sup> In our study, too, we also determined that students who were exposed to sexual cyber aggression develop more negative sexual attitudes ( $p < 0.05$ ). In their study conducted with adult women, Alan Dikmen and Cankaya did not find a relationship between sexual attitude and sexual violence. Sexual attitudes are influenced by more than one factor such as society's attitude towards sexuality, values, beliefs, the meaning they attribute to gender, and the sociodemographic possibilities of the family in which he/she grew up.<sup>17,32</sup> The difference is thought to be due to the fact that the research was conducted in different groups.

It was determined that students who were exposed to sexual cyber aggression carried out more cyber aggressions to their partners ( $p < 0.05$ ). Sandoval-Jurado et al. reported that those who had a history of perpetrating violence before and/or exposing to violence carried out more violence to their partners.<sup>33</sup> Fazel et al. stated that those who were previously exposed to domestic violence or witnessed the violence between their parents perpetrated violence to their partners in their future lives.<sup>34</sup> It is now an accepted fact that violence is a social learning and is passed down. Witnessing violence in the family or immediate environment can cause violence to become common and the individual to use violence later in life.<sup>35</sup> Our finding supports the study of Sandoval-Jurado et al. and Fazel et al.<sup>33,34</sup>

## LIMITATION

Due to the fact that sexuality is considered a private matter in Türkiye, the fact that students may not have

marked the statements that fully reflect their opinions when answering the questionnaire questions constitutes the limitation of our research.

## CONCLUSION

In the conclusion, it was determined that one-third of the students use the internet to search for sexual topics and that the intended purposes were to learn about the hymen, to have virtual sexual intercourse, to view pornographic videos, to search for sexual partners, to connect to sexual chatting rooms, and to view sexually implicit images. It was found that about one-seventh of the students were exposed to sexual cyber aggression, and being female and connecting online sexual chatting rooms were determined to pose risk factors in terms of exposure to sexual cyber aggression. Besides, those who were exposed to sexual cyber aggression were found to develop more negative sexual attitudes and penetrated cyber aggression in the relationship more.

## Source of Finance

*During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.*

## Conflict of Interest

*No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.*

## Authorship Contributions

**Idea/Concept:** Ali Kızıllırmak; **Design:** Ali Kızıllırmak, Mehtap Sönmez, Sermin Timur Taşhan; **Control/Supervision:** Sermin Timur Taşhan; **Data Collection and/or Processing:** Ali Kızıllırmak, Mehtap Sönmez, Gülçin Nacar; **Analysis and/or Interpretation:** Ali Kızıllırmak, Gülçin Nacar; **Literature Review:** Gülçin Nacar, Ali Kızıllırmak; **Writing the Article:** Ali Kızıllırmak, Gülçin Nacar, Mehtap Sönmez, Sermin Timur Taşhan; **Critical Review:** Sermin Timur Taşhan.

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