

RESEARCH

Open Access

ARAŞTIRMA

Açık Erişim

Investigation of the Relationship Between Cyber Dating Violence and Attachment Styles in University Students

Üniversite Öğrencilerinde Siber Flört Şiddeti ile Bağlanma Stilleri Arasındaki İlişkinin İncelenmesi

Ahmet Erdem , Emine Tunç , Şefika Erdem 

Authors Information

Ahmet Erdem

Assistant Professor, Tokat Gaziosmanpaşa University, Tokat, Turkey ahmet.erdem@gop.edu.tr

Emine Tunç

Research Assistant, Bolu Abant İzzet Baysal University, Bolu, Turkey eminetunc@ibu.edu.tr

Şefika Erdem

Assistant Professor, Tokat Gaziosmanpaşa University, Tokat, Turkey sefikaerdem@pd@gmail.com

ABSTRACT

This study was conducted to adapt the Cyber Dating Violence Scale (CDVS), which was developed to measure whether adolescents and young adults experienced online violence from their partners and whether they used online violence against their partners, into Turkish and to investigate the relationship between attachment styles and cyber dating violence in university students. The scale adaptation study group consisted of 300 participants, and the main study group included 476 participants. The "Cyber Dating Violence Scale", the "The Experiences in Close Relationships Inventory-I", and a "Personal Information Form" were used as data collection tools. According to the findings, abuse psychological violence, which is a sub-dimension of cyber dating violence, was predicted by anxious attachment and avoidant attachment of Adult Attachment Styles Scale, and abuse relational violence sub-dimension was predicted only by avoidant attachment sub-dimension. Both victimization relational violence and victimization psychological violence sub-dimensions of cyber dating violence were predicted only by the anxious attachment sub-dimension. Regarding the effect of gender, the avoidant attachment styles and abuse relational violence scores of females were significantly higher than those of males. The findings were discussed according to the literature, and various suggestions were presented in this direction.

Article Information

Keywords

Cyber Dating Violence
Attachment Styles
University Students

Anahtar Kelimeler

Siber Flört Şiddeti
Bağlanma Stilleri
Üniversite Öğrencileri

Article History

Received: 16/10/2021

Revision: 13/01/2022

Accepted: 01/02/2022

ÖZET

Bu çalışmada, ergenlik çağı ve genç yetişkinlikteki bireylerin partnerlerinden çevrimiçi şiddet görüp görmediğini ve partnerlerine çevrimiçi şiddet uygulayıp uygulamadıklarını ölçmek amacıyla geliştirilen Siber Flört Şiddeti Ölçeği'nin (SFŞÖ) Türkçeye uyarlanması ve üniversite öğrencilerinde siber flört şiddeti ile bağlanma stilleri arasındaki ilişkinin incelenmesi amaçlanmıştır. Araştırmanın ölçek uyarlama kısmı çalışma grubu 300 katılımcıdan, ana çalışma grubu ise 476 katılımcıdan oluşmaktadır. Veri toplama araçları olarak "Siber Flört Şiddeti Ölçeği", "Yetişkin İlişkilerde Bağlanma Stilleri Ölçeği" ve "Kişisel Bilgi Formu" kullanılmıştır. Elde edilen bulgulara göre siber flört şiddetinin mağdur etme psikolojik şiddet alt boyutu yetişkin ilişkilerde bağlanma stilleri ölçeğinin kaygı ve kaçınma alt boyutları tarafından, mağdur etme ilişkisel şiddet alt boyutu ise yalnızca kaçınma alt boyutu tarafından yordanmaktadır. Siber flört şiddetinin hem mağdur olma ilişkisel şiddet hem de mağdur olma psikolojik şiddet alt boyutları bağlanma stillerinin sadece kaygı alt boyutu tarafından yordanmaktadır. Üniversite öğrencilerinde cinsiyete göre ise kadınların kaçınan bağlanma düzeyleri ve mağdur etme ilişkisel şiddet puanları erkeklere göre anlamlı olarak daha yüksektir. Elde edilen bulgular alanyazına göre tartışılmış ve bu doğrultuda çeşitli öneriler sunulmuştur.

Cite this article as: Erdem, A., Tunç, E., & Erdem, Ş. (2022). Investigation of the relationship between cyber dating violence and attachment styles in university students. *Turkish Psychological Counseling and Guidance Journal*, 12(64), 171-188. <https://doi.org/10.17066/tpdrd.1096231>

Ethical Statement: The data of this article was obtained in 2018. Since there was no ethics committee in the Tokat Gaziosmanpaşa University where the data were obtained that year, the data were obtained by obtaining permission from the university administration and by signing informed consent from the students in the faculties.(02.02.2018).

INTRODUCTION

Internet technology and digitalization are gradually developing, thereby facilitating people's lives (Schmidt & Cohen, 2014). Yet, despite its facilitating properties, the damaging effects of internet technology on people's lives are also substantial (Avşaroğlu & Akbulut, 2020; Hamarta et al., 2021; Koyuncu et al., 2014; Nakayama et al., 2020). Recent studies have drawn attention to the effects of the Internet on facilitating abuse and aggression (Werner et al., 2010; Xu et al., 2015). Anonymity (or privacy), which is one of the most important features of the Internet, can decrease the human behavior of individuals to question the consequences of their own actions or to take responsibility for them (Diener, 1980; Peris et al., 2002; Zimbardo, 1970). Another problematic feature of the Internet is the lack of features that make it easier for individuals to be understood by using the contexts in communication in addition to understanding each other through verbal/written context as in social life. Accordingly, with the Internet and developing technologies, even behaviors that would not have been considered as violence before may become widespread due to such features of the Internet (Morelli et al., 2016a, 2016b). Dating violence can be considered as another type of violence that can become widespread with the use of the Internet as a result of these characteristics.

Dating violence is a new type of violence that has been studied extensively in the literature in recent years (Aslan et al., 2008; Soft, 2013; Soft & Şahin, 2014). There are three types of this violence: physical, psychological, and sexual (Price et al., 1999; Saltzman et al., 2002). Also, scales have been developed to measure these characteristics of dating violence separately (Price et al., 1999; Soft & Şahin, 2014). In the current literature, there are studies investigating whether dating violence also occurs online (Zweig et al., 2013; Morelli et al., 2017).

The fact that the Internet has become a highly advanced technology allows individuals to stay connected from anywhere and to be accessible at any time. While these features do not pose a problem when used positively, they can bring more harm than good to the life of the individual when used negatively. The fact that the Internet does not have physical and temporal boundaries causes individuals to control the lives of their partners, humiliate them among their friends, and be harmed (Melander, 2010; Zweig et al., 2014).

In the literature, while there are studies that show mutual anger in dating relationships turns into violence (Whitaker et al., 2007), there are also studies that directly measure the attitudes of adolescents and young adults towards dating violence (Yumuşak, 2013; Yumuşak & Şahin, 2014). This was also confirmed by the scales developed. Though most of the scales that directly measure cyber violence focus on victimization or abuse, very few of them have been confirmed (Borrajo et al., 2015). The attempt to break up the relationship of one's lover with her/his friends can be considered as relational dating violence (Wolfe et al., 2001), which is one of the types of dating violence. This type of violent behavior carried out on the Internet is considered as a type that differs from other behaviors of violence (Morelli et al., 2017).

Attachment

Bowlby conducted some studies that would form the basis of attachment theory with the call of the World Health Organization in the 1950s. In the World Health Organization report, which was prepared in the light of these studies, the effects of maternal deprivation on children were examined, but Bowlby continued his studies because there were important deficiencies in the causes of these effects (Soysal et

al., 2005). According to Bowlby (1969), attachment is defined as the behavior of seeking or maintaining closeness to another individual. Attachment is the infant's feeling of intimacy with the individual who meets their physiological needs from the first moment and seeking security. The attachment system allows the child to gain a sense of trust and to recognize the environment, as well as meeting their physiological needs (Göçener, 2010). The attachment styles formed by the baby towards the caregiver in these early periods will also have an effect on the close relationships established in the later stages of life (Kaya, 2017). That is, children's internalization of their relationships with caregivers and attachment styles also show similarities to relationships established with others outside the family in the following years (Bowlby, 1969).

Based on Bowlby's (1969) attachment theory, Hazan and Shaver (1987; 1994) studied the effect of attachment behavior in adulthood. Accordingly, they stated that people establish a relationship with their partners in their romantic relationships similar to the relationship they established with their caregivers in their infancy. For a secure attachment style to be formed, it is important that the physiological needs of the baby are met on time and the caregiver feeds it when it is hungry and shows affection when it cries. However, if the baby's physiological needs are not met on time or an inconsistent attitude is displayed, it develops an insecure attachment style. While individuals with an experience of secure attachment become more self-confident, can express their feelings and thoughts comfortably in their social relationships, and become autonomous individuals in adulthood, individuals with an experience of insecure attachment style become those who have low self-confidence, see themselves as less valuable, and experience adjustment problems in their interpersonal relationships (Karabacak & Demir, 2017). Individuals with secure attachment also see themselves as worthy of love and believe that others can help them when they need it (Mikulincer & Shaver, 2007). However, the situation is different for anxious and avoidant attachment styles in the insecure attachment group, which is the opposite of secure attachment. When children with an anxious attachment style cannot see their parents, they experience intense stress and fear, and when they see their parents, it is not easy to calm down. It can be said that parents or caregivers may have exhibited inconsistent behaviors while meeting the needs of these children, and they may have sometimes been indifferent while meeting the needs of the child. In this case, it is very difficult for the child to develop a sense of trust towards the parent. By generalizing this situation to adulthood, the child cannot easily feel a sense of trust in the relationships they establish and approaches their environment with concerns and suspicion. Children with this attachment style become overly dependent on their partners in adulthood (Soğancı, 2017). An individual with anxious attachment is intensely concerned about whether their partner will be accessible or supportive in case of need in the relationship. At the same time, they constantly exhibit addiction, fear of abandonment and rejection, and obsessive attitudes in close relationships (Mikulincer & Shaver, 2007). Unlike anxious attachment, children with an avoidant attachment style do not show much stress when they are separated from their parents, and when they see their parents, they are unresponsive and do not care (Çamurlu Keser, 2006). The needs of these children may have often been ignored by their parents. They may not have spent much time with their parents and shared emotionally. These children, who cannot develop confidence in their parents, become individuals who do not easily have connections in their social relations and prefer loneliness when they become adults (Soğancı, 2017). When considered in terms of romantic relationships in the future, these individuals try to maintain an emotional distance towards their partner in the relationship and minimize interdependence with their partners. For this reason, they try to maintain their distance by avoiding establishing a warm, supportive, and compassionate relationship with their partners (Shaver et al., 2005).

In addition to avoiding intimacy, these individuals become distrustful of other people and even try to do everything alone to avoid intimacy (Hazan & Shaver, 1987; Mikulincer & Shaver, 2007).

Developmentally, romantic relationships have an important place in the early years of adolescence and adulthood. Young individuals discover and form their values, expectations, and beliefs about close relationships especially in this period (Johnson et al., 2014). On the other hand, technological developments have begun to direct the course of romantic relationships, too. Partners have the opportunity to communicate with each other more easily thanks to especially communication technologies, but they have also started to control each other more (Postmus, 2013). The determination of dating violence experienced in romantic relationships especially in the first years of adulthood and the variables that cause it and taking precautions in this regard make up an important turning point for healthy romantic relationships (Exner-Cortens, 2014). Attachment styles are thought to be related to the violence experienced in dating relationships. Reflecting on this point of view, this study was conducted to adapt the Cyber Dating Violence Scale (CDVS), which was developed to measure whether adolescents and young adults experienced online violence from their partners and whether they used online violence against their partners, into Turkish and to investigate the relationship between attachment styles and cyber dating violence in university students.

METHOD

The correlational survey model was used in this study. In this model, the presence/absence and degree of variation between two or more variables are measured (Karasar, 2000). In this study, the relationship between cyber dating violence and attachment styles was examined.

Participants and Procedures

The sample of the scale adaptation study consisted of 476 university students. The analysis was carried out with the data of 436 participants after 40 data that involved too many unanswered items and extreme values and did not contribute to normality were removed. The age range of the participants was 17-30 ($x=20.31$, $sd=2.43$). The convenience sampling method was used for selecting the study group. Participants consisted of students from two universities, one in the Black Sea region and the other in the Central Anatolia region.

The sample of the study, which was conducted to examine the relationship between attachment and dating violence, consisted of 300 university students. The age range of the participants was 18-28 ($x=20.78$, $sd=1.76$). The convenience sampling method was used for selecting the study group. Participants consisted of students from two universities, one in the Black Sea region and the other in the Central Anatolia region.

In the study, as in the original study, the participants were told to perceive the "short message" statement as "any kind of online text messages" while responding to the questionnaire items. The participants who had a current dating relationship were told to respond to the items according to this relationship. Those who did not have a current dating relationship were told to respond to the items according to their last dating relationship. The data of those who did not have any dating relationship were excluded from the set. In addition, the "Facebook" statement in the scale items was changed to "social media" after taking the permission of the researcher.

Ethical Statement

The data of this article was obtained in 2018. Since there was no ethics committee in the Tokat Gaziosmanpaşa University where the data were obtained that year, the data were obtained by obtaining permission from the university administration and by signing informed consent from the students in the faculties.

Data Collection Tools

The Personal Information Form. On this form, there are questions about the gender, age, department, school year, and relationship status of the participants.

The Cyber Dating Violence Scale (CDVS). This scale was created by Morelli et al. (2017) and developed by Wolfe et al. (2001) by changing the verbal/emotional, relational, and abuse dimensions. The items of the scale were modified by adding the "text message/e-mail/Facebook" phrases to evaluate cyber violence. The "short message" phrase was explained as "any kind of text message on the Internet" in the directive of the scale. The items were rephrased for abuse and victimization. Thus, two forms of the scale were formed. The scale has a 4-point Likert-type structure (0=Never, 3=6 or more).

Before developing the scale, exploratory factor analysis was performed with the items obtained. It was found that the 11-item of the abuse sub-dimension explained 55.66% of the total variance and that 11-item of the victimization sub-dimension explained 55.60% of the total variance. The explained variance was 37.90% for the abuse psychological violence sub-dimension of the scale (six items) and 17.76% for the abuse relational violence (five items). The relationship between these factors was $r=.43$. Two sub-dimensions emerged in the victimization sub-dimension, too. The explained variance was 38.95% for the psychological violence (six items) and 16.65% for the relational violence (five items). The relationship between the two sub-dimensions was $r=.48$. When the internal consistency of the scales was examined, Cronbach's alpha value was found as .82 for the victimization sub-dimension and .81 for the relational violence sub-dimension. Cronbach's alpha value was .82 for the victimization psychological violence sub-dimension and .82 for the victimization relational violence sub-dimension.

After that, confirmatory factor analysis was conducted for this structure of the scale. At this stage, both the single-factor structure and the two-factor relational structure were tested. Since the goodness-of-fit indices of the two-factor relational structure showed a better fit, the researchers agreed on this structure. The goodness of fit indices related to this structure was Chi-square=311.17, RMSEA=.067, CFI=.97, NFI=.97, and NNFI=.96 for the abuse sub-dimension, and they were Chi-square=415.30, RMSEA=.079, CFI=.96, NFI=.96, and NNFI=.95 for the victimization sub-dimension.

The Experiences in Close Relationships Inventory-I (ECRI-I). This inventory was developed by Brennan Clark, & Shaver (1998) to measure the anxiety experienced in attachment in close relationships and avoidance from others. There are 36 items on the scale, including 18 for avoidance and 18 for anxiety. It is a 7-point Likert-type inventory. Participants rate the extent to which each item describes themselves on a seven-point scale (1 = does not describe me at all, 7 = completely describes me). Sümer (2006) examined the factor structure of the scale and found two dimensions, namely, anxious and avoidant attachment, as in the original scale. Factor values ranged from .318 to .731 for the anxiety dimension and between .466 and .754 for the avoidance dimension. These dimensions explained 38% of the total variance. An increase in the score obtained from any of the dimensions indicates an increase in anxious

attachment or avoidant attachment. The reliability scores of the scale are .86 for the anxiety dimension and .90 for the avoidance dimension. Both dimensions have high-reliability coefficients.

RESULTS

This section includes findings regarding the adaptation of the Cyber Dating Violence Scale into Turkish, prediction of cyber dating violence by attachment styles, and the findings related to the effect of gender on cyber dating violence and attachment styles.

The Factor Structure of the Cyber Dating Violence Scale and its Reliability Study

To adapt the Cyber Dating Violence Scale (CDVS) into Turkish, first, the permission of the developers of the original scale was obtained. The items of the scale were translated into Turkish by three academicians who have a good command of English and work as experts in the field of educational sciences. The translation of the items was written under the original items of the English form, and experts scored the suitability of the translation. A 10-point Likert-type scoring (1-not appropriate at all, 10-completely appropriate) was used for the evaluation of the items. At this stage of the research, five experts were consulted. These experts were academics who have experience abroad, have been educated in a foreign language, and have an advanced level of English. Table 1 presents experts' assessment of each item of the cyber dating violence scale for the appropriateness of the translation.

Table 1. Mean and standard deviation values for the appropriateness of the translation of the cyber dating violence scale

Cyber Dating Violence Scale		
Abuse		
Items	Mean	SD
1	8.71	1.70
2	9.57	.53
3	9.28	.75
4	8.57	2.93
5	8.57	2.93
6	9.57	.53
7	9.00	1.82
8	9.71	.48
9	8.14	2.26
10	8.71	2.98
11	9.42	.53
Victimization		
1	9.85	.37
2	9.71	.48
3	9.42	.78
4	8.57	2.93
5	8.57	2.93
6	9.71	.48
7	9.14	1.86
8	9.42	.78
9	8.28	2.36
10	9.71	.48
11	9.71	.48

In the next stage, the scale was translated back into English by an expert. This expert was doing a Ph.D. in educational sciences at a university abroad then and spoke advanced English. The translations obtained

were compared with the original form, and they were found appropriate. The scale was finalized after the proposed changes had been made.

Exploratory factor analysis was performed on the data obtained from the sample to determine the validity of the scales. For this purpose, KMO (Kaiser-Meyer-Olkin) was used to test the adequacy of the sample size so that the results of the factor analysis could be interpreted, and the Barlett Test of Sphericity was employed to determine the suitability of the data for factor extraction. It was found that factor analysis could be conducted for the abuse (KMO=.83 and Barlett ($\chi^2_{2436}=1286.48$, $p<.001$)) and the victimization (KMO=.84 and Barlett ($\chi^2_{2436}=1415.06$, $p<.001$)) sub-dimensions of the cyber dating violence scale. Since the factors of subscales of the cyber dating violence scale were conceptually related to each other and a correlation was observed between the two factors in the study in which the scale was developed (Morelli et al., 2017), a high correlation was expected between the factors, and the factor structure was examined by principal component analysis using Promax rotation. In this way, it was tested whether the subscales would show a 2-factor structure as in the original scale. As a result of the first analysis, a 2-factor structure with eigenvalues greater than 1 emerged for both subscales. When factor loads were examined, it was found that only item 11 was not in the factor that it should be in both subscales. As a result of the exploratory factor analysis, it was concluded that the scale had a structure with two-factor sub-dimensions in the Turkish sample, similar to its original version.

After this analysis, confirmatory factor analysis was conducted on the AMOS software to determine to what extent the original structure of the scale was compatible with the data obtained from the Turkish sample and to determine its validity. The original structure of the scale was analyzed, and it was found to show a moderate level of agreement (Abuse sub-Scale: ($\chi^2_{436}=220.36$, $p<.001$, CFI=.86, AGFI=.87, RMSEA=.09); Victimization sub-Scale: ($\chi^2_{436}=201.11$, $p<.001$, CFI=.88, AGFI=.88, RMSEA=.09)) When the modifications suggested by the model were examined, it was decided that they were not directly related to each other, although they increased agreement when applied, and therefore, the modifications were not carried out. After this stage, item 11 (Abuse Subscale: I threatened to hurt my girlfriend/boyfriend via text messages/e-mail/social media; Victimization Subscale: My girlfriend/boyfriend threatened to hurt me via e-mails/social media/text messages/), which was in a different factor in both scales, was removed from the analysis, and the analysis was repeated. As a result of the analysis, it was suggested that a modification was needed between items 1 and 6 and between items 1 and 2. When the related items were examined, it was decided that they were related and that modifications were established between them. As a result of the analysis, it was seen that both models of the subscales had a good fit (Abuse subscale: ($\chi^2_{436}=115.46$, $p<.001$, CFI=.93, AGFI=.92, RMSEA=.06); Victimization subscale: ($\chi^2_{436}=97.21$, $p<.001$, CFI=.95, AGFI=.93, RMSEA=.06)). The ratio of the Chi-square value of the abuse sub-dimension to the degree of freedom was 3.6, and the ratio of the Chi-square value of the victimization sub-dimension to the degree of freedom was 3.03.

To determine the reliability of the cyber dating violence scale, Cronbach's alpha internal consistency coefficient was calculated. Cronbach's alpha coefficient of the abuse sub-dimension was .78, and it was .77 for the psychological violence sub-dimension (6 items) and .74 for the relational violence sub-dimension (4 items). Cronbach's alpha coefficient of the victimization sub-dimension was .81, and it was .80 for the psychological violence sub-dimension (6 items), and .72 for the relational violence sub-dimension (4 items). Nunnally and Bernstein (1994) and Başol (2012) considered a reliability coefficient

of .70 and above adequate in their studies. Relevant factor loads and goodness-of-fit indices are presented in Table 2 and Table 3. In this context, it can be stated that the scales are reliable and valid.

Table 2. Factor Loads of the Cyber Dating Intensity Scale

Cyber Dating Intensity Scale					
Abuse sub-dimension			Victimization sub-dimension		
Items	Factor 1	Factor 2	Item	Factor 1	Factor 2
1	.73		1	.80	
2	.64		2	.75	
3	.75		3	.70	
4	.67		4	.67	
5	.62		5	.52	
6	.69		6	.73	
7		.74	7		.63
8		.65	8		.81
9		.85	9		.83
10		.78	10		.68
Eigenvalue	3.65	1.64	Eigenvalue	3.84	1.51
Explained variance	36.57	16.41	Explained variance	38.35	15.05
Total variance	52.98		Total variance	53.40	

Table 3. Goodness-of-fit indices of Cyber Dating Violence Scale

Abuse	NFI	.91
	CFI	.93
	IFI	.90
	RMSEA	.06
	GFI	.95
	AGFI	.92
	RMR	.02
	SRMR	.05
Victimization	NFI	.92
	CFI	.95
	IFI	.93
	RMSEA	.06
	GFI	.96
	AGFI	.93
	RMR	.02
	SRMR	.05

Table 4. t-test analysis of the variance in the abuse and victimization sub-dimensions of the cyber dating violence and the sub-domains of psychological violence and relational violence, and avoidant and anxious attachment levels in university students.

Variable	Gender	n	x	Sd	t	p
Abuse Psychological Violence	Female	222	4.70	3.52	.92	.58
	Male	78	4.27	3.54		
Abuse Relational Violence	Female	222	.34	.74	1.95	.00*
	Male	78	.16	.54		
Victimization Psychological Violence	Female	222	4.71	4.00	-1.52	.34
	Male	78	5.52	4.25		
Victimization Relational Violence	Female	222	1.01	2.09	-.59	.48
	Male	78	1.18	2.35		
Anxious Attachment	Female	222	63.26	19.06	-1.14	.52
	Male	78	66.11	18.60		
Avoidant Attachment	Female	222	54.82	18.36	1.31	.03*
	Male	78	51.79	14.56		

As seen in the table, females had significantly higher abuse relational violence scores than males. Females used more relational violence than males. In addition, females' avoidant attachment levels were significantly higher than those of males. There was no significant difference in terms of other variables.

Table 5. Results of correlation analysis between the level of psychological violence, which is the sub-domain of abuse sub-dimension of the cyber dating violence scale, and anxious attachment

Abuse	1	2	3
Psychological violence	-	.42*	.30*
Anxious attachment	.42*	-	.27*
Avoidant attachment	.30	.27*	-

*p<.05

Table 6. The results of regression analysis for the prediction of abuse psychological violence sub-dimension by attachment level

Variables	B	T	p
Abuse psychological violence		-2.50	.01*
Anxious attachment	.37	6.84	.00*
Avoidant attachment	.19	3.64	.00*

R=.46, R2=.21 F(2,297)=39.70*

*p<.05

As seen in Table 6, the anxious and avoidant attachment levels of university students significantly predicted the abuse psychological violence sub-dimension of the cyber dating violence scale. Fourteen percent of the abuse psychological violence levels was explained by the anxious attachment levels of university students ($p < .05$) and five percent by the avoidant attachment levels ($p < .05$). According to the results, anxious attachment predicted the level of abuse psychological violence of the cyber dating violence at a higher level.

Table 7. The results of the correlation analysis between the relational violence level, which is the abuse sub-dimension of the cyber dating violence scale, and attachment levels

Variables	1	2	3
Abuse relational violence	-	.10	.16
Anxious attachment	.10	-	.27*
Avoidant attachment	.16	.27*	-

*p<.05

Table 8. The results of regression analysis for the prediction of abuse relational violence sub-dimension by the attachment level

Variables	B	T	p
Abuse relational violence		-1.31	.30
Anxious attachment	.37	1.11	.26
Avoidant attachment	.19	2.45	.01*

R=.18, R2=.04 F(2,297)=4.74*

*p<.05

As seen in Table 8, the avoidant attachment level of university students significantly predicted the abuse relational violence sub-dimension of the cyber dating violence scale, but the anxious attachment level of the students did not predict it. The avoidant attachment level of university students explained 2% (p<.05) of abuse relational violence levels.

Table 9. The results of correlation analysis between the level of psychological violence sub-domain of the victimization sub-dimension of the cyber dating violence scale and the levels of attachment

Variables	1	2	3
Victimization psychological violence	-	.49*	.20*
Anxious attachment	.49*	-	.27*
Avoidant attachment	.20*	.27*	-

*p<.05

Table 10. The results of regression analysis for the prediction of victimization psychological violence by the attachment level

Variables	B	T	p
Victimization psychological violence		-2.87	.00*
Anxious attachment	.47	8.92	.00*
Avoidant attachment	.07	1.46	.15

R=.49, R2=.24 F(2,297)=47.86*

*p<.05

As seen in Table 10, university students' level of anxious attachment significantly predicted the level of victimization psychological violence sub-dimension of the cyber dating violence scale, but avoidant attachment levels were found to not predict it significantly. The anxious attachment levels of university students explained 22% of the victimization psychological violence levels.

Table 11. The results of correlation analysis between victimization relational violence sub-dimension of the cyber dating violence scale

Variables	1	2	3
Victimization relational violence	-	.29*	.15
Anxious attachment	.29*	-	.27*
Avoidant attachment	.15	.27*	-

*p<.05

Table 12. The results of regression analysis for the prediction of victimization relational violence sub-dimension by the attachment level

Variables	B	T	p
Victimization relational violence		-2.92	.00*
Anxious attachment	.27	4.69	.00*
Avoidant attachment	.08	1.43	.15

R=.30, R2=.09 F(2,297)=14.96*

*p<.05

As seen in Table 12, the anxious attachment level of the university students significantly predicted the victimization relational violence sub-dimension of the cyber dating violence scale, but the avoidant attachment levels did not predict it significantly. The anxious attachment levels of university students explained 7% of the victimization relational violence levels (p<.05).

DISCUSSION

This study was conducted to examine the relationship between cyber dating violence and attachment styles in university students. The first finding obtained as a result of the analyses was that the psychological violence sub-dimension of the abuse sub-scale of the cyber dating violence scale was predicted by the anxious attachment and avoidant attachment subscales of the attachment styles and that the relational violence sub-dimension of the abuse sub-scale was predicted only by avoidant attachment sub-dimension. The research findings on the relationship between avoidant attachment style and cyber dating violence show differences in the relevant literature, and the results also differ between males and females. Studies have found that there is a relationship between avoidant attachment style and using dating violence between males (Babcock et al., 2000; Holtzworth-Munroe et al., 1997; Lawson & Malnar, 2011). In another study, a positive relationship was found between avoidant attachment styles and using dating violence for males, but the results were not the same for females (Doumas et al., 2008). However, in addition to studies showing that there is no relationship between avoidant attachment styles and dating violence in adult dating relationships (Bookwala & Zdaniuk, 1998; Rapoza & Baker, 2008), there are also studies showing a negative relationship (Lee et al., 2014). It is very important for individuals with an avoidant attachment style to be independent in a relationship and to maintain a relational distance with their partners (Mikulincer & Shaver, 2012). Individuals with this style are particularly uncomfortable when their partner is too attached or too close to them. In such cases, individuals with avoidant attachment experience the anxiety of being too close to their partner in the dating relationship but also seek a way to distance their partner from themselves (Brennan et al., 1998; Lee et al., 2014). Desire to distance partners from themselves and distance themselves from their partners in a dating relationship also increases the likelihood of individuals with avoidant attachment styles to resort to destructive conflict resolution strategies (Mikulincer & Shaver, 2012). As a result, individuals with an avoidant attachment may inflict

violence on their partners in a dating relationship. Allison et al., (2008) revealed that males with avoidant attachment use violence to distance their partners and maintain distance.

The finding that the anxious attachment style predicted the abuse psychological violence sub-dimension, which is a subscale of cyber dating violence, is similar to the results of the studies conducted (Bookwala & Zdaniuk, 1998; Lee et al., 2014; Rapoza & Baker, 2008; Tussey et al., 2018). Individuals with higher attachment anxiety have higher fears of being abandoned, rejected, or not loved by their romantic partners (Brennan et al., 1998; Lee et al., 2014). These concerns about losing a partner can trigger violent behavior in a dating relationship (Tussey et al., 2018). In other words, dating violence can be motivated by the fear of abandonment in individuals with anxious attachment. Violence emerges as one of the strategies used by anxious individuals to protect their relationship (Gormley & Lopez, 2010). Moreover, the relationship between attachment anxiety and dating violence is based on Bowlby's (1984) interpretation of violence as a dysfunctional behavior used to maintain intimacy with the attachment figure (Allison et al., 2008). According to a study, males with an anxious attachment used violence against their partners to build intimacy with their partners and to attract the attention of their partners (Allison et al., 2008). On the other hand, individuals with high attachment anxiety are in constant doubt about whether they are loved in their romantic relationships. This suspicion can cause individuals with anxious attachment to experience outbursts of anger or jealousy as they constantly seek confidence (Hazan & Shaver, 1987). Studies show that attachment anxiety is also associated with increased affect, impulsivity, anger and temper, aggression, and low self-control (Alexander & Anderson, 1994; Bartholomew, 1990; Gormley & Lopez, 2010). All these findings can explain the controlling, coercive, and violent behaviors exhibited by individuals with higher levels of anxious attachment.

Another finding of the study was that both the sub-dimensions of victimization relational violence and victimization psychological violence were predicted only by the anxious attachment sub-dimension. Similar to this finding, a study on adult couples showed that partners with an anxious attachment style were more vulnerable to dating violence (Péloquin et al., 2011). There are strong connections between anxious attachment and different forms of victimization, especially among women (Yarkovsky & Fritz 2014). Henderson et al., (1997) found that most of the women identified as victims of violence had high attachment anxiety. Individuals with high attachment anxiety have difficulty in breaking up even if they are in a violent relationship because they experience high separation anxiety and fear of losing. These individuals can do their best to establish and maintain strong attachment ties even if the attachment figure (mostly romantic partner in adulthood) is a source of threat (Dutton & Painter, 1993). This situation can cause individuals with anxious attachment to be vulnerable to violence. Pepler (2012) suggested that individuals with insecure attachment who are prone to use destructive conflict resolution strategies tend to choose partners with similar attachment styles. This can lead to the emergence of a negative communication pattern by increasing vulnerability to victimization in romantic relationships. Thus, conflict patterns that emerge with insecure attachment can lead to mutually aggressive behaviors in dating relationships (Burk & Seiffge-Krenke, 2015).

Another finding of the study was that females resort to abuse relational violence more than males. In the related literature, some studies show that females are more likely to control their partners online than males (Bennett et al., 2011; Burke et al., 2011). Generally, males resort to direct aggression, in other words, physical aggression. Contrary to males, females are more likely to engage in relational aggression, such as spreading rumors and gossiping about males (Borrajo & Gamez-Guadix, 2015). In line with the

research findings, the examination of the attachment styles by gender indicated that the avoidant attachment style scores of females were significantly higher than those of males. Studies conducted so far support this finding (Özgül et al., 2019).

Conclusion and Recommendations

Addressing dating relationships experienced in the early stages of adulthood has an important place in terms of young individuals' development of healthy relationships. Violent behavior is one of the leading negative experiences, especially in romantic relationships. The findings obtained from this study, in which the relationship between cyber dating violence and attachment styles in university students was examined, was that attachment styles were determinant on violence realized through technology within dating relationships. In this study, the attachment styles variable was discussed, and future studies can address different concepts that are thought to be related to cyber dating violence. On the other hand, this study, which was carried out with university students, can also be carried out with different age groups and married individuals.

REFERENCES

- Alexander, P. C., & Anderson, C. L. (1994). An attachment approach to psychotherapy with the incest survivor. *Psychotherapy, 31*(4), 665–675. <https://doi.org/10.1037/0033-3204.31.4.665>
- Allison, C. J., Bartholomew, K., Mayselless, O., & Dutton, D. G. (2008). Love as a battlefield: Attachment and relationship dynamics in couples identified for male partner violence. *Journal of family issues, 29*(1), 125-150. Doi:[10.1177/0195213X07306980](https://doi.org/10.1177/0195213X07306980)
- Aslan, D., Vefikuluçay, D., Zeyneloğlu, S., Erdost, T., Temel, F., & Söztutar, E. (2008). *Ankara'da iki hemşirelik yükseköğretim kurumunun birinci ve dördüncü sınıflarından okuyan öğrencilerinin flört şiddetine maruz kalma, flört ilişkilerinde şiddet uygulama durumlarının ve bu konudaki görüşlerinin saptanması araştırması*. Hacettepe Üniversitesi Kadın Sorunları Araştırma Merkezi. http://www.huksam.hacettepe.edu.tr/Turkce/SayfaDosya/flort_siddeti.pdf
- Avşaroğlu, S., & Akbulut, Ö. F. (2020). Sağlıklı aile yapısı açısından bir risk faktörü: İnternet bağımlılığı [A risk factor in terms of healthy family structure: internet addiction]. *International Social Sciences Studies Journal, 6*(65), 2879-2902. <http://dx.doi.org/10.26449/sss.2456>
- Babcock, J. C., Jacobson, N. S., Gottman, J. M., & Yerington, T. P. (2000). Attachment, emotional regulation, and the function of marital violence: Differences between secure preoccupied, and dismissing violent and nonviolent husbands. *Journal of Family Violence, 15*(4), 391-409. <https://doi.org/10.1023/A:1007558330501>
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*(2), 147-178. <https://doi.org/10.1177/0265407590072001>
- Başol, G. (2012). *Eğitimde ölçme ve değerlendirme. [Measurement and evaluation in education]*. Pegem Akademi Yayıncılık.
- Bennett, D. C., Guran, E. L., Ramos, M. C., & Margolin, G. (2011). College students' electronic victimization in friendships and dating relationships: Anticipated distress and associations with risky behaviors. *Violence and Victims, 26*(4), 410-429. <https://doi.org/10.1891/0886-6708.26.4.410>
- Bookwala, J., & Zdaniuk, B. (1998). Adult attachment styles and aggressive behaviors within dating relationships. *Journal of Social and Personal Relationships, 15*(2), 175-190. <https://doi.org/10.1177/0265407598152003>
- Borrajó, E., Gámez-Guadix, M., Pereda, N., & Calvete, E. (2015). The development and validation of the cyber dating abuse questionnaire among young couples. *Computers in Human Behavior, 48*, 358-365. <https://doi.org/10.1016/j.chb.2015.01.063>
- Bowlby, J. (1969). *Attachment and loss: Attachment*. Basic Books.

- Johnson, W. L., Giordano, P. C., Manning, W. D., & Longmore, M. A. (2014). The age-IPV curve: changes in the perpetration of intimate partner violence during adolescence and young adulthood. *Journal of Youth and Adolescence*, 44(3), 708-726. <https://doi.org/10.1007/s10964-014-0158-z>
- Karabacak, A., & Demir, M. (2017). Özerklik, bağlanma stilleri, bilinçli farkındalık ve duygu düzenleme arasındaki ilişkilerin incelenmesi [Examination of the relationship between autonomy, attachment styles, mindfulness and emotion regulation] *Bayburt Eğitim Fakültesi Dergisi*, 12(23), 271-291. <https://dergipark.org.tr/en/pub/befdergi/issue/30012/323202>
- Karasar, N. (2000). *Bilimsel araştırma yöntemleri: Kavramlar, ilkeler, terimler. [Scientific research methods: Concepts, principles, terms]*. Nobel Yayın Dağıtım.
- Kaya, Ş. (2017). *Ergenlerde ana-babaya bağlanma örüntüsünün benlik saygısı ve yalnızlık ile ilişkisi [The relationship between attachment patterns with parents self esteem and loneliness in adolescents]*. [Unpublished master thesis]. Fatih Sultan Mehmet Vakıf Üniversitesi.
- Koyuncu, T., Ünsal, A., & Arslantaş, D. (2014). Assessment of internet addiction and loneliness in secondary and high school students. *J Pak Med Assoc*, 64(9), 998-1002. <https://pubmed.ncbi.nlm.nih.gov/25823176/>
- Lawson, D. M., & Malnar, S. G. (2011). Interpersonal problems as a mediator between attachment and intimate partner violence. *Journal of Family Violence*, 26(6), 421-430. <https://doi.org/10.1007/s10896-011-9376-2>
- Lee, M., Reese-Weber, M., & Kahn, J. H. (2014). Exposure to family violence and attachment styles as predictors of dating violence perpetration among men and women: a mediational model. *Journal of Interpersonal Violence*, 29(1) 20-43. <https://doi.org/10.1177/0886260513504644>
- Melander, L. A. (2010). College students' perceptions of intimate partner cyber harassment. *Cyberpsychology, behavior, and social networking*, 13(3), 263-268. <https://doi.org/10.1089/cyber.2009.0221>
- Mikulincer, M. & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. Guilford Press.
- Mikulincer, M., & Shaver, P. R. (2012). Adult attachment orientations and relationship processes. *Journal of Family Theory & Review*, 4(4), 259-274. <https://doi.org/10.1111/j.1756-2589.2012.00142.x>
- Morelli, M., Bianchi, D., Baiocco, R., Pezzuti, L., & Chirumbolo, A. (2016a). Sexting, psychological distress and dating violence among adolescents and young adults. *Psicothema*, 28(2), 137-142. <http://www.psicothema.com/pdf/4303.pdf>
- Morelli, M., Bianchi, D., Baiocco, R., Pezzuti, L., & Chirumbolo, A. (2016b). Not-allowed sharing of sexts and dating violence from the perpetrator's perspective: The moderation role of sexism. *Computers in Human Behavior*, 56, 163-169. <https://doi.org/10.1016/j.chb.2015.11.047>
- Morelli, M., Bianchi, D., Chirumbolo, A., & Baiocco, R. (2017). The cyber dating violence inventory. Validation of a new scale for online perpetration and victimization among dating partners. *European Journal of Developmental Psychology*, 15(4), 464-471. <https://doi.org/10.1080/17405629.2017.1305885>
- Nakayama, H., Ueno, F., Mihara, S., Kitayuguchi, T., & Higuchi, S. (2020). Relationship between problematic internet use and age at initial weekly internet use. *Journal of Behavioral Addictions*, 9(1), 129-139. <https://doi.org/10.1556/2006.2020.00009>
- Nunnally, J. C. (1994). *Psychometric theory 3E*. Tata McGraw-Hill Education.
- Özgül, S. S., Demir, V., & Ünübol, H. (2019). Kaygılı ve kaçınan bağlanma örüntülerinin cinsiyet değişkenine göre duygusal şemalarla olan ilişkisinin incelenmesi. [Examination of the relation of anxious and avoidant attachment styles with emotional schemes according to gender]. *Kıbrıs Türk Psikiyatri ve Psikoloji Dergisi*, 1(3), 173-179. <https://doi.org/10.35365/ctjpp.19.1.22>
- Péloquin, K., Lafontaine, M. F., & Brassard, A. (2011). A dyadic approach to the study of romantic attachment, dyadic empathy and psychological partner aggression. *Journal of Social and Personal Relationships*, 28(7), 915-942. <https://doi.org/10.1177/0265407510397988>

- Pepler, D. (2012). The development of dating violence: What doesn't develop, what does develop, how does it develop, and what can we do about it?. *Prevention Science*, 13(4), 402-409. <https://doi.org/10.1007/s11121-012-0308-z>
- Peris, R., Gimeno, M. A., Pinazo, D., Ortet, G., Carrero, V., Sanchiz, M., & Ibanez, I. (2002). Online chat rooms: Virtual spaces of interaction for socially oriented people. *CyberPsychology & Behavior*, 5(1), 43-51. <https://doi.org/10.1089/109493102753685872>
- Postmus, L. J. (2013). *Sexual violence and abuse: An encyclopedia of prevention, impacts, and recovery*. ABC-CLIO.
- Price, E. L., Byers, E. S., Belliveau, N., Bonner, R., Caron, B., Doiron, D., ... & Moore, R. (1999). The attitudes towards dating violence scales: Development and initial validation. *Journal of Family Violence*, 14(4), 351-375. <https://link.springer.com/article/10.1023/A:1022830114772>
- Rapoza, K. A., & Baker, A. T. (2008). Attachment style, alcohol, and childhood experience of abuse: An analysis of physical violence in dating couples. *Violence and Victims*, 23(1), 52-65. <https://doi.org/10.1891/0886-6708.23.1.52>
- Saltzman, L. E., Fanslow, J. L., McMahon, P. M., & Shelley, G. A. (2002). Intimate partner violence surveillance: Uniform definitions and recommended data elements [Electronic version]. Centers for Disease Control and Prevention. *National Center for Injury Prevention and Control*. http://www.cdc.gov/ncipc/pubres/ipv_surveillance/Intimate%20Partner%20Violence.pdf
- Schmidt, E., & Cohen, J. (2014). *Yeni dijital çağ: İnsanların, ulusların ve iş dünyasının geleceğini yeni baştan şekillendirmek. [The new digital age: Reshaping the future of people, nations and business]* (Ü. Şensoy). Optimist Yayınları.
- Shaver, P. R., Schachner, D. A., & Mikulincer, M. (2005). Attachment style, excessive reassurance seeking, relationship processes, and depression. *Personality and Social Psychology Bulletin*, 31(3), 343-359. <https://doi.org/10.1177/0146167204271709>
- Soğancı, D. (2017). *Bağlanma stillerinin romantik ilişki doyumu üzerindeki etkisi, [Effect of attachment styles on romantic relationship satisfaction]* [Unpublished master thesis]. Haliç Üniversitesi.
- Soysal, A. Ş., Bodur, Ş., İşeri, E., & Şenol, S. (2005). Bebeklik dönemindeki bağlanma sürecine genel bir bakış. [Attachment Process in Infancy: A Review]. *Klinik Psikiyatri*, 8(2), 88-99. https://jag.journalagent.com/z4/download_fulltext.asp?pdire=kpd&plng=tur&un=KPD-80774
- Sümer, N. (2006). Yetişkin bağlanma ölçeklerinin kategoriler ve boyutlar düzeyinde karşılaştırılması [Categorical and Dimensional Comparison of the Adult Attachment Measures]. *Türk Psikoloji Dergisi [Turkish Journal of Psychology]*, 21(57), 1-22. https://www.researchgate.net/profile/Derya-Guengoer-2/publication/285081827_Psychometric_assessment_of_adult_attachment_styles_and_cross-cultural_comparison_of_scales_on_which_the_turkish_sample/links/582302a808ae61258e3c6df7/Psychometric-assessment-of-adult-attachment-styles-and-cross-cultural-comparison-of-scales-on-which-the-turkish-sample.pdf
- Tussey, B. E., Tyler, K. A., & Simons, L. G. (2018). Poor parenting, attachment style, and dating violence perpetration among college students. *Journal of Interpersonal Violence*, 36 (5-6), 1-20. <https://doi.org/10.1177/0886260518760017>
- Werner, N. E., Bumpus, M. F., & Rock, D. (2010). Involvement in internet aggression during early adolescence. *Journal of Youth and Adolescence*, 39(6), 607-619. <https://doi.org/10.1007/s10964-009-9419-7>
- Whitaker, D. J., Haileyesus, T., Swahn, M., & Saltzman, L. S. (2007). Differences in frequency of violence and reported injury between relationships with reciprocal and nonreciprocal intimate partner violence. *American Journal of Public Health*, 97(5), 941-947. <https://doi.org/10.2105/AJPH.2005.079020>

- Wolfe, D. A., Scott, K., Reitzel-Jaffe, D., Wekerle, C., Grasley, C., & Straatman, A. L. (2001). Development and validation of the conflict in adolescent dating relationships inventory. *Psychological Assessment, 13*(2), 277-293. <https://doi.org/10.1037/1040-3590.13.2.277>
- Xu, B., Xu, Z., & Li, D. (2016). Internet aggression in online communities: A contemporary deterrence perspective. *Information Systems Journal, 26*(6), 641-667. <https://doi.org/10.1111/isj.12077>
- Yarkovsky, N., & Fritz, P. A. (2014). Attachment style, early sexual intercourse, and dating aggression victimization. *Journal of Interpersonal Violence, 29*(2), 279-298. <https://doi.org/10.1177/0886260513505143>
- Yumuşak, A. (2013). The Relationship Between University Students' Attitudes Towards Dating Violence, Gender, and Narcisistic Personality Characteristics [Unpublished master dissertation]. Gaziosmanpaşa Üniversitesi, Tokat.
- Yumuşak, A., & Şahin, R. (2014). The validity and reliability of attitudes towards dating violence scales. *Electronic Journal of Social Sciences, 13*(49), 233-252. <https://doi.org/10.17755/esosder.55295>
- Zimbardo, P. (1970). The human choice: Individuation, reason, and order versus deindividuation, impulse, and chaos. In W. J. Arnold & D. Levine (Eds.), 1969 *Nebraska Symposium on Motivation* (pp. 237-307). University of Nebraska Press.
- Zweig, J. M., Dank, M., Yahner, J., & Lachman, P. (2013). The rate of cyber dating abuse among teens and how it relates to other forms of teen dating violence. *Journal of Youth and Adolescence, 42*(7), 1063-1077. <https://doi.org/10.1007/s10964-013-9922-8>
- Zweig, J. M., Lachman, P., Yahner, J., & Dank, M. (2014). Correlates of cyber dating abuse among teens. *Journal of Youth and Adolescence, 43*(8), 1306-1321. <https://doi.org/10.1007/s10964-013-0047>

About Authors

Ahmet Erdem completed her undergraduate education Department of Psychological Counseling and Guidance at Selçuk University. She received her Master's degree and Ph.D. Department of Psychological Counseling and Guidance at Tokat Gaziosmanpaşa University. He is working as an assistant professor at Tokat Gaziosmanpaşa University, Faculty of Education, Psychological Counseling and Guidance Department since 2017.

Emine Tunç completed her undergraduate education Department of Psychological Counseling and Guidance at Sakarya University. She received her Master's degree Department of Psychological Counseling and Guidance at Bolu Abant İzzet Baysal University. He is working as research assistant at Bolu Abant İzzet Baysal University, Faculty of Education, Psychological Counseling and Guidance Department.

Şefika Erdem completed her undergraduate education Department of Psychological Counseling and Guidance at Selçuk University. She received her Master's degree and Ph.D. Department of Psychological Counseling and Guidance at Tokat Gaziosmanpaşa University. He is working as an assistant professor at Tokat Gaziosmanpaşa University, Faculty of Education, Psychological Counseling and Guidance Department since 2019.

Author Contribution

This study was conducted by all the authors working together and cooperatively. All of the authors substantially contributed to this work in each step of the study.

Conflict of Interest

It has been reported by the authors that there is no conflict of interest.

Funding

No funding support was received.

Note

A part of this study was presented as a paper at the 20th International Psychological Counseling and Guidance Congress.

Ethical Statement

The data of this article was obtained in 2018. Since there was no ethics committee in the university where the data were obtained that year, the data were obtained by obtaining permission from the university administration and by signing informed consent from the students in the faculties.

University Name: Tokat Gaziosmanpaşa University.

Approval Date: 01.02.2018