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# Cyber Dating Abuse in Higher Education Students: Self-Esteem, Sex, Age and Recreational Time Online

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**Abstract:** Cyber dating abuse represents a new form of dating violence that has been gaining worrying dimensions. Therefore, this study aims to analyze the relationship between cyber dating abuse and self-esteem, to understand the influence of sociodemographic variables (gender, age) and recreational time online on cyber dating abuse among Portuguese higher education students. For that, we randomly gathered a sample of 894 students. The results showed positive relationships between self-esteem and some cyber dating abuse factors. The sociodemographic variables show a significant effect of sex and age in some factors of this violence. Finally, it was observed that recreational time online had an effect on cyber dating abuse by direct aggression, both in terms of victimization and perpetration. In view of the results, the development of prevention and intervention programs aimed at this issue is considered relevant.

**Keywords:** cyber dating abuse; self-esteem; sex; age; recreational time online



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## 1. Introduction

In recent years, the use of new technologies has grown exponentially (Al-Alosi 2020; Vllora et al. 2019c), and they are an essential part of our daily lives (Douglas et al. 2019). New technologies, such as the internet, computers, social networks, e-mail, webcam, instant communication tools or mobile phones, have brought several benefits, both individually and socially, and they are now used to carry out various daily tasks, as they have also become a vital part of interpersonal relationships, expanding and facilitating human communication (Borrajó et al. 2015a; Douglas et al. 2019).

Although technological advances have led to several positive aspects, they are also associated with negative ones (Baker and Carreño 2015; Gracia-Leiva et al. 2020; Mosley and Lancaster 2019; Smith et al. 2018; Stonard 2020) as they enable the emergence of various forms of abuse, such as cyberbullying (Hassan et al. 2019), cyberstalking (Duerksen and Woodin 2019) and cyber dating abuse (Al-Alosi 2020; Caridade and Braga 2019; Caridade et al. 2020; Machado et al. 2022; Zweig et al. 2014).

Cyber dating abuse is a recent form of dating violence (Brown and Hegarty 2018; Machado et al. 2022), which can be understood as the combination of three elements: “cyber”, “abuse” and “dating”. “Cyber” refers to the use of electronic means, such as cell phones, computers and the internet; “abuse” refers to the harmful behaviors perpetrated through these means; and, finally, “dating” refers to romantic relationships, both current and previous (Reed et al. 2016; Wolford-Clevenger et al. 2016).

Cyber dating abuse includes a wide range of abusive behaviors and according to (Borrajó et al. 2015b), there are two types of abuse, referring to both victimization and

perpetration, these being: direct aggression, which is defined as an aggressive and deliberate behavior carried out with the objective of injuring the partner or ex-partner, such as, for example, through insults or threats; and control, which is the act of controlling and invading the privacy of the partner or ex-partner through new technologies, such as, for example, using their passwords without authorization. Although it can be understood as a form of psychological violence, it can be distinguished from it in the sense that it offers the perpetrator not only the opportunity to access the victims at any time, but also publicly humiliate them in an extent previously deemed impossible (Zweig et al. 2014).

Cyber dating abuse is a common phenomenon (Kellerman et al. 2013) and has been associated with other forms of interpersonal violence, such as cyberbullying and offline dating violence (Borrajo et al. 2015a, 2015b; Caridade et al. 2020; Marganski and Melander 2015; Temple et al. 2016).

Some authors (Brewer and Kerslake 2015; Patchin and Hinduja 2010) found that the experience of cyberbullying, both as a victim and as a perpetrator, was associated with lower levels of self-esteem, which can be justified by the fact that individuals with lower self-esteem may be more likely to engage in aggressive behaviors in order to gain a sense of power and achieve higher levels of self-esteem (Ostrowsky 2010).

Self-esteem can be defined as a positive or negative attitude towards a particular object, namely, the self (Rosenberg 1965) and, according to Santos and Maia (2003), this can be understood as the positive or negative assessment that individuals make regarding their personal characteristics. Thus, a higher self-esteem indicates that individuals see themselves as people with value, that is, that they have a more positive image about themselves, while a lower self-esteem indicates their devaluation and dissatisfaction with themselves (Rosenberg 1965; Santos and Maia 2003).

According to Taquette and Monteiro (2019), dating violence among adolescents is associated with low self-esteem. In the same sense, Moral et al. (2017) also stated that victims of dating violence have lower self-esteem than non-victims.

As for cyber dating abuse, Hancock et al. (2017) found that this type of violence is negatively associated with self-esteem and, in their study, this form of abuse predicted lower self-esteem and greater emotional distress in young adults. Furthermore, Smith et al. (2018) in an investigation with teenagers found that the experience of victimizing and hostile abuses of cyber dating, such as threats, was significantly related to lower self-esteem in adolescents. The authors also found that perpetration reduced the risk of having low self-esteem (Smith et al. 2018).

Violence practiced through cyber abuse is characterized by controlling and intimidating attitudes (Borrajo et al. 2015a), this type of behavior leads to a change in the perception of the victims, who start to make negative evaluations of themselves, which, in turn, end up having a significant impact on various areas of the lives of individuals, altering their well-being overall and their quality of life (Gámez-Guadix et al. 2018).

Other variables have been considered in the study of cyber dating abuse, namely sex (Bennett et al. 2011; Dick et al. 2014), age (Borrajo et al. 2015a; Van Ouytsel et al. 2018) and recreational time online (Marcum et al. 2017; Mosley and Lancaster 2019; Van Ouytsel et al. 2018), because, in general, both with respect to sex and with regard to age, the literature is not consensual.

Some authors refer that cyber dating abuse is related to being female, both in terms of victimization (Zweig et al. 2013, 2014) and in terms of perpetration (Villora et al. 2019c). Others argue that, in both dimensions, males present higher values (Durán-Segura and Martínez-Pecino 2015; García-Sánchez et al. 2017), and there are still studies that point to the absence of statistically significant differences between these two variables (Borrajo et al. 2015a; Caridade and Braga 2019; Curry and Zavala 2020; Hancock et al. 2017; Reed et al. 2016; Smith et al. 2018; Wolford-Clevenger et al. 2016).

Regarding the age variable, the results are still scarce. Some authors argue that there is no association between cyber dating abuse and age (Caridade and Braga 2019), while others observed an association of this phenomenon with a younger age (Borrajo et al. 2015a).

With regard to recreational time online, there seems to be a consensus in the literature that greater use of social networks seems to be positively associated with perpetration behaviors (Van Ouytsel et al. 2017a) and victimization by control (Van Ouytsel et al. 2018).

Given the scarcity of empirical evidence regarding cyber dating abuse and, consequently, about its relationship with variables discussed here, the present investigation aims to understand the relation between cyber dating abuse and self-esteem, characterize the prevalence of cyber dating abuse, verify the influence of sex and age on cyber dating abuse, and also understand whether there are differences in cyber dating abuse in relation to the recreational time (in hours) dedicated per day to the use of the internet, in higher education students, in Portugal.

## 2. Materials and Methods

### 2.1. Participants

In this study, 894 individuals (485 female and 409 male) aged between 17 and 56 years old ( $M = 21.27$ ,  $SD = 3.69$ ) were randomly recruited from Portuguese universities.

As for the love relationship, 554 (62%) participants claimed to be in a relationship and 340 (38%) said they were not dating. Of these, 153 (17.1%) said they have not been in a dating relationship in the last year and 187 (20.9%) said that they had.

Regarding the time dedicated per day to the internet in non-academic/professional tasks, 891 participants answered this question. Of these, 135 (15.2%) said they devoted up to one hour, 261 (29.3%) two hours, 242 (27.2%) three hours and 253 (28.3%) at least four hours.

### 2.2. Instruments

To carry out the present investigation, a sociodemographic questionnaire was used to collect information related to the participants' personal data.

Regarding to cyber dating abuse, the Portuguese version of the cyber dating abuse questionnaire (CDAQ) was used (Caridade and Braga 2019). This questionnaire collects information about abusive behaviors related to cyber dating abuse, making it possible to estimate the pattern of victimization and the pattern of perpetration, and covers two types of abuse: control (items 1, 5, 7, 11, 13, 14, 17, 19 and 20, e.g., "My partner/ex-partner has already controlled the updates on my social network profile") and direct aggression (items 2, 3, 4, 6, 8, 9, 10, 12, 15, 16 and 18, e.g., "My partner/ex-partner has already threatened to physically attack me through new technologies"). The Portuguese version (CibAn) is a self-reported instrument with 40 items, 20 referring to victimization and 20 to perpetration, which are answered on a six-point Likert scale. According to Caridade and Braga (2019), a Cronbach's alpha of 0.86 was obtained in the victimization by direct aggression factor and a Cronbach's alpha of 0.91 in the victimization by control factor. With regard to the perpetration by direct aggression factor, the authors obtained a Cronbach's alpha of 0.89 and in the perpetration by control factor, a Cronbach's alpha of 0.84. In this study, Cronbach's alpha was 0.87 for victimization by the direct aggression factor and 0.89 for victimization by the control factor. In turn, the Cronbach's alpha for the perpetration by direct aggression and by control factors were 0.90 and 0.81, respectively.

Regarding self-esteem, the Portuguese version of the Rosenberg self-esteem scale (RSES) was used (Rosenberg 1965), and was adapted by Santos and Maia in 2003. This scale measures global self-esteem and consists of 10 items (e.g., "Globally, I am satisfied with myself"), answered on a four-point Likert scale, of which five items are positive (items 1, 3, 4, 7 and 10) and the remaining five are negative (items 2, 5, 6, 8 and 9). The result varies between 10 and 40 wherein higher results means higher self-esteem. Regarding its psychometric properties, Santos and Maia (2003) obtained a Cronbach's alpha of 0.86. In this study, Cronbach's alpha was 0.67.

### 2.3. Procedure

The study was approved by the ethics committee of the higher education institution where it was conducted. The sample was collected in two ways: online, through the dissemination of the questionnaires on social networks and in person, at a Portuguese university. Both the protocol applied online, and the protocol applied in person included an informed consent that contained an explanation of the purpose of the investigation and the conditions for participation in it. In this consent, data confidentiality and voluntary participation were ensured. It also gave the participants the opportunity to ask questions related to their participation, and they were provided contact details for this purpose.

### 2.4. Data Analysis

Data descriptive statistics were presented, as mean (M) and standard deviation (SD), when appropriate. Skewness and kurtosis coefficients were computed for univariate normality analysis purposes and, through the analysis of these values, the use of nonparametric tests were found to be adequate.

The prevalence of cyber dating abuse was characterized. The association between cyber dating abuse and self-esteem was calculated using Spearman's correlation coefficient. According to Cohen (1988), a correlation value of 0.1 indicates a weak association, a value of 0.3 a moderate association and a correlation value equal to or greater than 0.5 is an indicator of a strong association. A Wilcoxon–Mann–Whitney test was used to investigate the differences between sex and age (divided into two groups based on mean age value) on the victimization and perpetration factors. Wilcoxon effect size ( $r$ ) was used as a measure of the effect size between groups according to the following rule: small ( $<0.1$ ), medium ( $<0.3$ ) and large ( $>0.5$ ).

Finally, to verify whether there were differences in cyber dating abuse in relation to the recreational time dedicated per day to internet use, a Kruskal–Wallis test was performed, followed by the multiple comparison of mean ranks, when appropriate. Eta-squared  $H$  ( $\eta^2_H$ ) was reported as a measure of the effect size between groups. According to Steyn and Niekerk (2012) the guideline values for  $\eta^2_H$  are: small (0.01), medium (0.06) and large (0.14). All statistical analyses were performed using SPSS (IBM SPSS Statistics 27). Statistically significant effects were assumed for  $p < 0.05$ .

## 3. Results

### 3.1. Prevalence of Cyber Dating Abuse

Of the 554 participants who were in a romantic relationship, 327 (59%) reported having already experienced at least some cyber dating abuse behavior and 371 (67%) claimed to have perpetrated at least one act of this type of abuse. Analyzing the different types of cyber dating abuse, it appears that 94 (17%) participants reported having been victims of direct aggression and 310 (56%) assumed to have suffered victimization by control at least once. As for perpetration, 84 (15.2%) subjects reported having practiced some type of direct aggression and 354 (63.9%) reported having practiced control at least one time. It should be noted that, both in terms of victimization and in terms of perpetration, lower prevalence indicators (17 and 15.2%, respectively) were found, with respect to direct aggression, compared to control.

Of the 187 participants who reported not currently being in a relationship, but having been in a romantic relationship within the last year, 148 (79.1%) reported having experienced at least one cyber dating abuse behavior and 149 (80%) claimed to have perpetrated it. Analyzing the different types of cyber dating abuse, it appears that 83 (44.4%) participants reported having been victims of direct aggression and 138 (74%) reported having suffered victimization by control at least once. As for perpetration, 69 (37%) subjects reported having practiced some act of direct aggression and 143 (76.5%) reported having practiced some act of control through new technologies. It is also important to mention that, both in terms of victimization and perpetration, lower prevalence indicators (44.4% and 37%, respectively) were found with respect to direct aggression, compared to control.

Of the 153 participants who reported not having been in a romantic relationship within the previous year, 90 (58.8%) reported having experienced at least one cyber dating abuse behavior, with 51 (33.3%) reporting having been victims of direct aggression and 84 (54.9%) reported having suffered from victimization by control at least once. Regarding perpetration, 79 (51.6%) reported having perpetrated at least one act of this type of abuse, 26 (17%) reported having committed some act of direct aggression and 77 (50.3%) reported having committed some aggression by control. Similar to the results previously observed, also in this case, both in terms of victimization and in terms of perpetration, lower prevalence indicators (33.3% and 17%, respectively) were found with respect to direct aggression, compared to control.

### 3.2. Association between Cyber Dating Abuse and Self-Esteem

In order to analyze the association between cyber dating abuse and self-esteem among the 894 participants, Spearman's correlation coefficient was used (Table 1).

**Table 1.** Association between cyber dating abuse and self-esteem.

Variable	VD	VC	TV	PD	PC	TP	Self-Esteem
VD	1	0.475 **	0.630 **	0.658 **	0.311 **	0.408 **	0.088 **
VC		1	0.963 **	0.362 **	0.676 **	0.682 **	0.079 *
TV			1	0.458 **	0.662 **	0.699 **	0.092 **
PD				1	0.367 **	0.521 **	0.104 **
PC					1	0.971 **	0.053
TP						1	0.066 *
Self-esteem							1

Note. \*\*  $p < 0.001$ , \*  $p < 0.05$ ; VD = victimization by direct aggression; VC = victimization by control; TV = total victimization; PD = perpetration by direct aggression; PC = perpetration by control; TP = total perpetration.

The results indicate weak positive, but significant, correlations between self-esteem and victimization by direct aggression ( $\rho = 0.088$ ,  $p = 0.009$ ), victimization by control ( $\rho = 0.079$ ,  $p = 0.018$ ), total victimization ( $\rho = 0.092$ ,  $p = 0.006$ ), perpetration by direct aggression ( $\rho = 0.104$ ,  $p = 0.002$ ) and total perpetration ( $\rho = 0.066$ ,  $p = 0.047$ ).

As for the association between cyber dating abuse factors, these were positive and strongly correlated with each other, highlighting victimization by direct aggression and victimization by control ( $\rho = 0.475$ ,  $p < 0.001$ ), total victimization and victimization by direct aggression ( $\rho = 0.630$ ,  $p < 0.001$ ), total victimization and victimization by control ( $\rho = 0.963$ ,  $p < 0.001$ ), total victimization and total perpetration ( $\rho = 0.699$ ,  $p < 0.001$ ), perpetration by direct aggression and perpetration by control ( $\rho = 0.367$ ,  $p < 0.001$ ), total perpetration and perpetration by direct aggression ( $\rho = 0.521$ ,  $p < 0.001$ ), and total perpetration and perpetration by control ( $\rho = 0.971$ ,  $p < 0.001$ ).

### 3.3. Comparative Analysis

In order to verify the effect of sex on the victimization and on the perpetration factor, the Wilcoxon–Mann–Whitney test was conducted. Results are summarized in Table 2.

A significant effect of sex was found in victimization by direct aggression ( $U = 89,531.000$ ,  $W = 207,386.000$ ,  $p = 0.001$ ,  $r = 0.11$ ), victimization by control ( $U = 88,551.000$ ,  $W = 206,406.000$ ,  $p = 0.004$ ,  $r = 0.10$ ) and total victimization ( $U = 86,729.500$ ,  $W = 204,584.500$ ,  $p = 0.001$ ,  $r = 0.11$ ). Results indicate that males reported higher mean ranks than females.

With regard to perpetration, it appears that males presented higher scores than females, with these differences being statistically significant only in perpetration by direct aggression ( $U = 92,342.000$ ,  $W = 210,197.000$ ,  $p = 0.011$ ,  $r = 0.09$ ).

**Table 2.** Comparative analysis of victimization and perpetration by sex.

	Male (N = 409) Mean Rank	Female (N = 485) Mean Rank	Z	p	r
VD	471.10	427.60	−3.278	0.001	0.11
VC	473.49	425.58	−2.868	0.004	0.10
TV	477.95	421.82	−3.330	0.001	0.11
PD	464.22	433.40	−2.546	0.011	0.09
PC	455.27	440.95	−0.849	0.396	0.03
TP	457.33	439.21	−1.068	0.285	0.04

Note. VD = victimization by direct aggression; VC = victimization by control; TV = total victimization; PD = perpetration by direct aggression; PC = perpetration by control; TP = total perpetration.

Next, the Wilcoxon–Mann–Whitney test was conducted to compare the effect of age, divided into two age groups ([17,21], [21,56]) on cyber dating abuse and its factors (Table 3).

**Table 3.** Comparative analysis of victimization and perpetration by age.

	[17,21] Mean Rank	[21,56] Mean Rank	Z	p	r
VD	447.28	447.93	−0.047	0.963	0.02
VC	446.75	448.97	−0.126	0.900	0.004
TV	446.99	448.50	−0.085	0.932	0.002
PD	448.79	444.96	−0.300	0.764	0.01
PC	436.67	468.74	−1.805	0.071	0.06
TP	437.38	467.33	−1.676	0.094	0.06

Note. VD = victimization by direct aggression; VC = victimization by control; TV = total victimization; PD = perpetration by direct aggression; PC = perpetration by control; TP = total perpetration.

The results indicated that older individuals had statistically significant higher values in perpetration by control ( $U = 82,978.000$ ,  $W = 258,506.000$ ,  $p = 0.035$ ,  $r = 0.06$ ) and in total perpetration ( $U = 83,403.000$ ,  $W = 258,931.000$ ,  $p = 0.047$ ,  $r = 0.06$ ), although the  $r$  value suggests a small effect.

To verify whether recreational time online (divided into four categories) has a significant effect on victimization and perpetration factors, a Kruskal–Wallis test was used (Table 4).

**Table 4.** Differential comparative analysis of victimization and perpetration, in relation to recreational time online.

	Up to 1 h Mean Rank	2 h Mean Rank	3 h Mean Rank	4 or More Hours Mean Rank	$\chi^2_{KW}$	p	$\eta^2_H$
VD	452.80	422.43	440.63	471.83	8.433	0.038	0.006
VC	456.44	442.93	432.82	456.21	1.391	0.708	0.002
TV	454.62	436.59	433.99	462.59	2.199	0.532	0.001
PD	456.99	421.80	445.70	465.39	8.194	0.042	0.006
PC	454.20	420.67	447.08	466.72	4.551	0.208	0.002
TP	453.38	417.28	446.82	470.91	5.988	0.112	0.003

Note. VD = victimization by direct aggression; VC = victimization by control; TV = total victimization; PD = perpetration by direct aggression; PC = perpetration by control; TP = total perpetration.

The results indicate that recreational time online had a statistically significant effect on victimization by direct aggression. According to the multiple comparison of mean ranks, four or more hours online had a significantly different distribution from the results for two hours spent online, in relation to victimization by direct aggression ( $p = 0.004$ ). The observed results indicated that the subjects who spend more recreational time online were more likely to be victims of cyber dating abuse by direct aggression.

As for perpetration, the results showed that recreational time online had a statistically significant effect on perpetration by direct aggression. The multiple comparison of mean ranks indicates that four or more hours spent online had a significantly different distribution the results for two hours spent online, in relation to the perpetration by direct aggression ( $p = 0.006$ ). The observed results indicate that subjects who spend more recreational time online practice more acts of direct aggression than the subjects who spend two hours.

#### 4. Discussion

The present study aims to understand the relation between cyber dating abuse and self-esteem, to characterize the prevalence of cyber dating abuse, to verify the influence of sex and age on cyber dating abuse, and also to understand whether there are differences in cyber dating abuse in relation to recreational time (in hours) dedicated per day to the use of the internet, among higher education students in Portugal.

It was found that, both among students who are currently in a relationship, as well as students who have been in a relationship before, the results revealed that more than half claimed to have experienced at least some type of cyber dating abuse behavior. More specifically, it was found that of the participants who are currently in a relationship, 59% said they had been victims of some type of cyber dating abuse, while 67% said they had perpetrated it. In turn, 79.1% of individuals who had been in a relationship in the previous year (but who are not currently) reported having been victims of cyber dating abuse, and 80% said they had perpetrated it. Regarding the participants who reported not having been in a relationship recently, that is, in the past year, 58.8% reported having already experienced at least some type of cyber dating abuse behavior and 51.6% reported having perpetrated it.

The literature is still scarce in the Portuguese context, however, it appears that the results obtained are in agreement with the results of [Caridade and Braga \(2019\)](#) which, using the same instrument as the one used in the present study, found that, out of 272 students involved in a romantic relationship in the last year (98.6% being university students), 59.2% reported having been victim of some type of cyber dating abuse behavior and 66.9% said they had perpetrated it. In turn, [Caridade and Braga \(2020\)](#) reported slightly lower values and in their study, with a sample of 173 participants (of which 48.6% were university students), 40.2% reported having experienced at least some type of cyber dating abuse and 42.2% claimed to have perpetrated it.

In the international context, the reported values vary considerably. In a systematic review carried out by [\(Caridade et al. 2020\)](#), values between 5.8% and 92% for victimization and between 8.1% and 93.7% for perpetration were reported. This variability can be explained by the methodological differences and the differences between the samples ([Caridade et al. 2019](#); [Wolford-Clevenger et al. 2016](#)). For example, in a study carried out in the United States of America, [Marganski and Melander \(2015\)](#) observed that, in a sample of 540 university students, 73% stated that they had been victims of this phenomenon in the last year. [Wolford-Clevenger et al. \(2016\)](#) found a slightly lower prevalence, and in a sample of 502 university students, the overall prevalence of victimization was 40%. In Spain, [Borrajo et al. \(2015a\)](#) observed that, in a sample of 433 university students, more than 50% stated that they had been victims of cyber dating abuse in the past six months.

Still in this sense, it was possible to verify that participants who are not currently in a dating relationship, but who had been in the last year, presented higher percentages of cyber dating abuse than those who are currently in a relationship, both with respect to victimization and perpetration. These results can be explained by the fact that at the end

of a romantic relationship, the desire to get in touch or to reconcile with the ex-partner constitutes a common reality (Dardis and Gidycz 2017), making it difficult to abandon the relationship, which may lead to the occurrence of certain behaviors to maintain contact or to control and monitor the ex-partner (Belu et al. 2016). Moreover, the fact that individuals are not currently involved in a dating relationship could allow them a certain distance, enabling a clearer assessment of situations, given that, according to Lee (1997), being involved in a romantic relationship can decrease the ability to recognize certain behaviors as abusive.

However, it was observed that participants who reported not having been in a relationship recently, that is, in the past year, had lower percentages than those presented by the other two groups of participants, that is, those who are or had been in a dating relationship in the last year, both in terms of victimization and perpetration.

Ferreira and Matos (2013) observed that, of a sample of 107 female participants who were in an intimate relationship, 63.8% stated that they had been victims of stalking by their ex-partner for six or more months, while a smaller percentage (34.5%) reported that this phenomenon lasted for more than two years. The same authors observed that 98.1% of participants, who were victims of stalking, reported having adopted some strategies to deal with it, such as seeking help from friends/family. In this sense, the results of this last group in the present investigation may be due to the fact that participants have adopted strategies to deal with cyber dating abuse, which consequently decreased its prevalence, both in terms of victimization and perpetration.

By looking at the results, it was possible to observe that, when compared to direct aggression behaviors, control behaviors had higher values, both in victims and in perpetrators. These results are in agreement with those presented in other studies, namely in the study of Caridade and Braga (2019), in which higher values of cyber dating abuse were observed in control compared to direct aggression. More specifically, percentages of 53.7% were reported in victimization by control and 59% in perpetration by control, in contrast to 18% in victimization by direct aggression and 14.7% in perpetration by direct aggression (Caridade and Braga 2019). International literature also points in the same direction, that is, in the sense of a higher prevalence of cyber dating abuse by control compared to cyber dating abuse by direct aggression (Borrajó et al. 2015b; Gracia-Leiva et al. 2020; Reed et al. 2016).

This higher prevalence in control can be explained by several factors, namely the fact that it includes less explicit abusive behaviors and, consequently, more likely to be accepted (Caridade and Braga 2019, 2020). These behaviors are today standard behaviors and, therefore, more difficult to be perceived as abusive (Caridade et al. 2020). In this sense, Stonard (2020) argued that these can be normalized, being that, for example, accessing the partner's mobile phone or messages was, in their study, considered to be common behavior.

Another explanation may be related to the fact that these behaviors can be perceived as synonymous with love and/or showing jealousy (Caridade et al. 2019, 2020). It is also important to mention that cyber dating abuse and, in particular, control, appears in a common way in contexts of jealousy, given that the use of new technologies can awaken and/or exacerbate this feeling (Baker and Carreño 2015; Borrajó et al. 2015a; Kellerman et al. 2013) by publishing photographs or exchanging messages with others (Van Ouytsel et al. 2019).

Moreover, the results may also be related to new technologies whose use, as mentioned above, has increased significantly in recent years (Villora et al. 2019a). These are described as a tool that provides opportunities to perpetrate abusive behaviors (Gracia-Leiva et al. 2020; Stonard 2020), one of its main uses being partner control (Baker and Carreño 2015; Reed et al. 2016). Thus, the results can be explained not only by the increased use of new technologies, but also by the fact that nowadays it is normal to share a greater amount of information through them, which allows certain behaviors to not be seen as intrusive (being, consequently, seen as non-abusive) unless accompanied by more serious abusive behaviors (Reed et al. 2016). Thus, it is possible that as new technologies develop, behaviors previously interpreted as intrusive, are now interpreted as normative (Duerksen and Woodin 2019), which can contribute to a higher percentage of their occurrence.

Still with regard to cyber dating abuse, the association between its factors was analyzed, verifying that they are positive and strongly correlated with each other. Thus, individuals who are victims and/or perpetrators of cyber dating abuse by direct aggression were also victims and/or perpetrators of cyber dating abuse by control. In addition, it can also be seen that victims of cyber dating abuse (both by direct aggression and by control) also manifested perpetration behaviors (both by direct aggression and by control), thus observing a reciprocity in the practice of this typology of violence, which is in line with what has been reported by the existing literature (Caridade et al. 2019; Reed et al. 2016; Temple et al. 2016; Villora et al. 2019c).

These results can be explained by several factors, namely through Bandura's social learning theory, according to which behaviors are learned through social interactions (Bandura 1976). In this way, the observed reciprocity can be explained through mutual learning between partners (Villora et al. 2019c), "transforming" victims into perpetrators and vice-versa. Additionally, Curry and Zavala (2020) hypothesized that, as a consequence of cyber dating abuse of which they are victims, victims can also become perpetrators as a coping mechanism to deal with abuse, which makes the victims become perpetrators and also the initial perpetrators then become victims.

In the analysis of the association between cyber dating abuse and self-esteem, it was possible to verify that the results point to the existence of positive correlations between self-esteem and all of the factors measured by the instrument, however, it is important to mention that in perpetration by control, although a positive correlation is present, it was not statistically significant.

In terms of victimization, the obtained results do not corroborate the existing literature, which points to the existence of a negative association between the two variables, that is, individuals with higher levels of cyber dating abuse are described as reporting lower self-esteem (Hancock et al. 2017; Smith et al. 2018), contrary to what was verified in the present investigation.

This divergence can be justified by several factors. On the one hand, the fact that the instrument used to measure self-esteem is self-reported may have associated questions of social desirability. On the other hand, as mentioned earlier, abusive behaviors (and in particular, control behaviors) can be seen as synonymous with love and/or showing jealousy (Caridade and Braga 2020; Caridade et al. 2020) which, consequently, may imply that they do not have the expected impact on the victims' self-esteem. In addition, the results can also be explained by the reciprocity between victimization and perpetration in the sense that, since victims of cyber dating abuse may also manifest perpetration behaviors and that perpetrators have a higher self-esteem, it can be possible that victims also show higher levels of self-esteem.

As for perpetration, the results obtained are in line with the literature and, similarly to what was observed in the present study, Smith et al. (2018) found that the perpetration of cyber dating abuse was associated with a higher self-esteem.

However, it is important to mention that individuals with high self-esteem feel more confident in themselves and tend to seek social support, which can facilitate the use of more adaptive and adjusted coping behaviors in situations of victimization (Duru et al. 2019).

Regarding the relationship between cyber dating abuse and the sociodemographic variables studied, the results point to the fact that, with regard to sex, there were statistically significant differences, observing that males had higher victimization scores. In addition, it was found that the same is true in relation to perpetration, however, it was only statistically significant in terms of direct aggression.

There is no consensus in the literature regarding this variable. On the one hand, some results pointed to the fact that experiences of cyber dating abuse victimization (Dick et al. 2014; Zweig et al. 2013, 2014) and perpetration (Villora et al. 2019b) were correlated with being female.

On the other hand, there is literature that points to the absence of statistically significant differences between sexes (Borrajó et al. 2015a; Caridade and Braga 2020; Curry and Zavala

2020; Hancock et al. 2017; Reed et al. 2016; Smith et al. 2018; Wolford-Clevenger et al. 2016). However, differences are reported in terms of the experience and consequences of cyber dating abuse, which seems to be more harmful to females, and also in the perpetrated behaviors, as females report more frequently monitoring and controlling behaviors (Reed et al. 2017), however, these aspects have not been analyzed in the present investigation.

In the same way as the results found in the present study, several authors reported that males presented higher values than females in victimization (Bennett et al. 2011; Durán-Segura and Martínez-Pecino 2015; García-Sánchez et al. 2017) and in perpetration (Durán-Segura and Martínez-Pecino 2015; García-Sánchez et al. 2017) of this type of violence, which can be explained by the fact that, males are particularly reactive to controlling and monitoring behaviors, by reporting them (Zweig et al. 2013). In addition, there may be a change in our society, in the sense that males may increasingly assume themselves as victims of abusive behaviors, however, this hypothesis is merely speculative.

With regard to age, there were only differences in perpetration by control and in total perpetration, observing that older individuals had higher values of cyber dating abuse in these factors. These results are in line with the research of Van Ouytsel et al. (2017b), in which being older was positively related with the perpetration of controlling and digital monitoring behaviors.

As for victimization, the results are in line with the existing theoretical framework, that is, the non-existence of statistically significant differences in cyber dating abuse in relation to age (Caridade and Braga 2020).

However, in addition to the scarce empirical evidence, there is no consensus in the literature. For example, Borrajo et al. (2015a) found that being younger was associated with a higher frequency of cyber dating abuse. In this sense, there is a need for more research on this variable.

In addition, it is important to note that despite the significant age variability presented in the sample collected, the vast majority of individuals were aged between 17 and 21 years, which may also have had some influence on the results obtained.

Finally, with regard to the last objective, that is, the relationship between cyber dating abuse and recreational time online, it was found that the individuals who spend more time online were more victims and perpetrators of cyber dating abuse by direct aggression, which only partially corroborates the existing literature. As mentioned earlier, new technologies are now part of adolescents' and young adults' daily lives, and their exponential growth has led to the appearance of new opportunities for the occurrence of various forms of abuse, including cyber dating abuse (Al-Alosi 2020; Caridade and Braga 2019; Caridade et al. 2020; Stonard 2018). In this sense, Mosley and Lancaster (2019) observed that more time spent on mobile phones and computers predicted greater victimization. In addition, Van Ouytsel et al. (2017a) observed that the frequency of social network use was associated with the perpetration of cyber dating abuse.

These results can be explained by the fact that being more present on the internet and on social networks can lead to greater exposure of individuals to their partners (Villora et al. 2019a), with the latter having a greater facility in contacting and reaching them (Marcum et al. 2017; Marganski and Melander 2015; Van Ouytsel et al. 2017b). Furthermore, cyber dating abuse by direct aggression may have been statistically significant because the behaviors associated with it are more explicit compared to control behaviors and, therefore, more easily identifiable (Caridade and Braga 2019, 2020).

## 5. Conclusions

This research aims to contribute to the increasing amount of literature regarding this typology of dating violence, as well as to clarify its relationship with several variables, in this case: self-esteem, sex, age, and recreational time online. The practical implications of this study include, through increasing knowledge about this reality, a greater awareness of the population. Moreover, and given that cyber dating abuse is often understood as something natural (Caridade and Braga 2019), it is hoped that these results may have a role in prevention,

namely through the implementation of programs for the prevention of risky behaviors and community awareness programs that aim to contribute to a better understanding of the phenomenon. In addition, it would be pertinent to join efforts to incorporate intervention programs to face this phenomenon, since an early intervention can prevent this type of behavior from being maintained in future relationships (Caridade et al. 2019).

Throughout this study, it was possible to identify some limitations that should be considered when interpreting the results. The first one concerns the fact that this is a cross-sectional study, which makes it impossible to compare results over time, as well as to establish causal inferences between variables. Another limitation is related to the fact that the data collection was carried out through self-reported instruments, which can lead to a bias by the participants. Finally, it should also be noted that the sample was made up exclusively of higher education students, which makes it impossible to generalize the results to other sociodemographic groups.

With regard to future clues, it would be important to carry out longitudinal studies, in order to allow the establishment of inferences of causality. In addition, instruments, such as interviews could be used, in order to obtain qualitative information, which would enrich the information collected, namely in terms of, for example, motivations and consequences of cyber dating abuse. Furthermore, it would be interesting to study the perspective of the couples/ex-couples, since CibAn only provides information regarding the participant's individual perspective. It is also relevant for future investigations to study other aspects related to the dating relationship, namely the sexual orientation of the participants, in order to understand whether there are differences.

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## References

- Al-Alosi, Hadeel. 2020. Fighting fire with fire: Exploring the potential of technology to help victims combat intimate partner violence. *Aggression and Violent Behavior* 52: 1–10. [CrossRef]
- Baker, Charlene K., and Patricia K. Carreño. 2015. Understanding the role of technology in adolescent dating and dating violence. *Journal of Child and Family Studies* 25: 308–20. [CrossRef]
- Bandura, Albert. 1976. *Social Learning Theory*. Hoboken: Prentice Hall.
- Belu, Charlene F., Bell H. Lee, and Lucia F. O'Sullivan. 2016. It hurts to let you go: Characteristics of romantic relationships, breakups and the aftermath among emerging adults. *Journal of Relationships Research* 7: 1–11. [CrossRef]
- Bennett, Diana C., Elyse L. Guran, Michelle C. Ramos, and Gayla Margolin. 2011. College students' electronic victimization in friendships and dating relationships: Anticipated distress and associations with risky behaviors. *Violence and Victims* 26: 410–29. [CrossRef] [PubMed]
- Borrajó, Erika, Manuel Gámez-Guadix, and Esther Calvete. 2015a. Cyber dating abuse: Prevalence, context, and relationship with offline dating aggression. *Psychological Reports* 116: 565–85. [CrossRef] [PubMed]
- Borrajó, Erika, Manuel Gámez-Guadix, Noemí Pereda, and Esther Calvete. 2015b. The development and validation of the cyber dating questionnaire among young couples. *Computers in Human Behavior* 48: 358–65. [CrossRef]
- Brewer, Gayle, and Jade Kerslake. 2015. Cyberbullying, self-esteem, empathy and loneliness. *Computers in Human Behavior* 48: 255–60. [CrossRef]

- Brown, Cynthia, and Kelsey Hegarty. 2018. Digital dating abuse measures: A critical review. *Aggression and Violent Behavior* 40: 44–59. [[CrossRef](#)]
- Caridade, Sónia Maria, and Teresa Braga. 2019. Versão portuguesa do cyber dating abuse questionnaire (CDAQ)—Questionário sobre ciberabuso no namoro (CibAN): Adaptação e propriedades psicométricas [Portuguese version of cyber dating abuse questionnaire (CDAQ)—Questionário sobre ciberabuso no namoro (CibAN): Adaptation and psychometric properties]. *Análise Psicológica* 1: 93–105. [[CrossRef](#)]
- Caridade, Sónia Maria, and Teresa Braga. 2020. Youth cyber dating abuse: A meta-analysis of risk and protective factors. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 14: 2. [[CrossRef](#)]
- Caridade, Sónia Maria, Hélder Fernando Pedrosa e Sousa, and Maria Alzira Pimenta Dinis. 2020. Cyber and offline dating abuse in a portuguese sample: Prevalence and context of abuse. *Behavioral Sciences* 10: 152. [[CrossRef](#)] [[PubMed](#)]
- Caridade, Sónia Maria, Teresa Braga, and Erika Borrajo. 2019. *Cyber dating abuse* (CDA): Evidence from a systematic review. *Aggression and Violent Behavior* 48: 152–68. [[CrossRef](#)]
- Cohen, Jacob. 1988. *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed. Hillsdale: Lawrence Erlbaum Associates, pp. 20–26.
- Curry, Theodore. R., and Egbert Zavala. 2020. A multi-theoretical perspective on cyber dating abuse victimization and perpetration within intimate relationships: A test of general strain, social learning, and self-control theories. *Victims and Offenders* 15: 499–519. [[CrossRef](#)]
- Dardis, Christina M., and Christine A. Gidycz. 2017. The frequency and perceived impact of engaging in in-person and cyber unwanted pursuit after relationship break-up among college men and women. *Sex Roles* 76: 56–72. [[CrossRef](#)]
- Dick, Rebecca N., Heather L. McCauley, Kelley A. Jones, Daniel J. Tancredi, Sandi Goldstein, Samantha Blackburn, Erica Monasterio, Lisa James, Jay G. Silverman, and Elizabeth Miller. 2014. Cyber dating abuse among teens using school-based health centers. *Pediatrics* 134: 1560–67. [[CrossRef](#)] [[PubMed](#)]
- Douglas, Heather, Bridget A. Harris, and Molly Dragiewicz. 2019. Technology-facilitated domestic and family violence: Women's experiences. *The British Journal of Criminology* 59: 551–70. [[CrossRef](#)]
- Duerksen, Kari N., and Erica M. Woodin. 2019. Technological intimate partner violence: Exploring technology-related perpetration factors and overlap with in-person intimate partner violence. *Computers in Human Behavior* 98: 223–31. [[CrossRef](#)]
- Durán-Segura, Mercedes, and Roberto Martínez-Pecino. 2015. Ciberacoso mediante teléfono móvil e internet en las relaciones de noviazgo entre jóvenes [Cyber abuse via mobile phone and internet in dating relationships among young people]. *Comunicar: Revista Científica de Comunicación y Educación* 22: 159–67. [[CrossRef](#)]
- Duru, Erdinç, Murat Balkis, and Turgut Turkdoğan. 2019. Relational violence, social support, self-esteem, depression and anxiety: A moderated mediation model. *Journal of Child and Family Studies* 28: 2404–14. [[CrossRef](#)]
- Ferreira, Célia, and Marlene Matos. 2013. Post-relationship stalking: The experience of victims with and without history of partner abuse. *Journal of Family Violence* 28: 393–402. [[CrossRef](#)]
- Gámez-Guadix, Manuel, Erika Borrajo, and Esther Calvete. 2018. Partner abuse, control and violence through internet and smartphones: Characteristics, evaluation and prevention. *Papeles del Psicólogo* 39: 218–27. [[CrossRef](#)]
- García-Sánchez, Paola Valeria, Cecilia Guevara-Martínez, José Luis Rojas-Solís, Fabiola Peña-Cárdenas, and Víctor Gerardo González Cruz. 2017. Apego y ciber-violencia en la pareja de adolescentes [Attachment and cyber violence in teenage partners]. *International Journal of Education and Psychology* 2: 541–49. [[CrossRef](#)]
- Gracia-Leiva, Marcela, Alice Puente-Martínez, Silvia Ubillos-Landa, José Luis González-Castro, and Darío Páez-Rovira. 2020. Off-and online heterosexual dating violence, perceived attachment to parents and peers and suicide risk in young women. *International Journal of Environmental Research and Public Health* 17: 3174. [[CrossRef](#)] [[PubMed](#)]
- Hancock, Kaitlin, Haley Keast, and Wendy Ellis. 2017. The impact of cyber dating abuse on self-esteem: The mediating role of emotional distress. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 11: 1–13. [[CrossRef](#)]
- Hassan, Hanan Elzeblawy, Eman Ali Abd El Moaty Sheha, Wafaa Mostafa Ahmed Gamel, and Ahmed Emad Eldin Arafa. 2019. Online harassment and cyberbullying victimization and its emotional impacts among female nursing and non-nursing students. *American Journal of Nursing* 7: 102–8. [[CrossRef](#)]
- Kellerman, Ilana, Gayla Margolin, Larissa A. Borofsky, Brian R. Baucom, and Esti Iturralde. 2013. Electronic aggression among emerging adults: Motivations and contextual factors. *Emerging Adulthood* 1: 293–304. [[CrossRef](#)]
- Lee, Rebecca K. 1997. Romantic and electronic stalking in a college context. *Journal of Women and the Law* 4: 373–466.
- Machado, Bárbara, Sónia Maria Caridade, Isabel Araújo, and Paula Lobato Faria. 2022. Mapping the cyber interpersonal violence among young populations: A scoping review. *Social Science* 11: 207. [[CrossRef](#)]
- Marcum, Catherine D., George E. Higgins, and Jason Nicholson. 2017. I'm watching you: Cyberstalking behaviors of university students in romantic relationships. *American Journal of Criminal Justice* 42: 373–88. [[CrossRef](#)]
- Marganski, Alison, and Lisa Melander. 2015. Intimate partner violence victimization in the cyber and real world: Examining the extent of cyber aggression experiences and its association with in-person dating violence. *Journal of Interpersonal Violence* 33: 1071–95. [[CrossRef](#)] [[PubMed](#)]
- Moral, María, Andrea García, Glenda Cuetos, and Carlos Sirvent. 2017. Violencia en el noviazgo, dependencia emocional y autoestima en adolescentes y jóvenes españoles [Dating violence, emotional dependence and self-esteem in spanish adolescents and young people]. *Revista Iberoamericana de Psicología y Salud* 8: 96–107. [[CrossRef](#)]

- Mosley, Marissa A., and Morgan Lancaster. 2019. Affection and abuse: Technology use in adolescent romantic relationships. *The American Journal of Family Therapy* 47: 52–66. [CrossRef]
- Ostrowsky, Michael K. 2010. Are violent people more likely to have low self-esteem or high self-esteem? *Aggression and Violent Behavior* 15: 69–75. [CrossRef]
- Patchin, Justin W., and Sameer Hinduja. 2010. Cyberbullying and self-esteem. *Journal of School Health* 80: 614–21. [CrossRef] [PubMed]
- Reed, Lauren A., Richard M. Tolman, and L. Monique Ward. 2016. Snooping and sexting: Digital media as a context for dating aggression and abuse among college students. *Violence Against Women* 22: 1556–76. [CrossRef] [PubMed]
- Reed, Lauren A., Richard M. Tolman, and L. Monique Ward. 2017. Gender matters: Experiences and consequences of digital dating abuse victimization in adolescent dating relationships. *Journal of Adolescence* 59: 79–89. [CrossRef] [PubMed]
- Rosenberg, Morris. 1965. *Society and the Adolescent Self-Image*. Princeton: Princeton University Press.
- Santos, Paulo Jorge, and José Maia. 2003. Análise factorial confirmatória e validação preliminar de uma versão portuguesa da escala de auto-estima de Rosenberg [Confirmatory factor analysis and preliminary validation of a portuguese version of Rosenberg's self-esteem scale]. *Psicologia: Teoria, Investigação e Prática* 2: 253–68.
- Smith, Kevin, Jude Mary Cénat, Andréanne Lapierre, Jacinthe Dion, Martine Hébet, and Karine Côte. 2018. Cyber dating violence: Prevalence and correlates among high school students from small urban areas in Quebec. *Journal of Affective Disorders* 234: 220–23. [CrossRef]
- Steyn, Gertruida Maria, and Eldridge Johannes Van Niekerk. 2012. *Human Resources Management in Education*, 3rd ed. Braamfontein: Unisa Press.
- Stonard, Karlie E. 2018. The prevalence and overlap of technology-assisted and offline adolescent dating violence. *Current Psychology* 38: 1–15. [CrossRef]
- Stonard, Karlie E. 2020. "Technology was designed for this": Adolescents' perceptions of the role and impact of the use of technology in cyber dating violence. *Computers in Human Behavior* 105: 106211. [CrossRef]
- Taquette, Stella R., and Denise Leite Maia Monteiro. 2019. Causes and consequences of adolescent dating violence: A systematic review. *Journal of Injury and Violence Research* 11: 137–47. [CrossRef]
- Temple, Jeff R., Hye Jeong Choi, Meagan Brem, Caitlin Wolford-Clevenger, Gregory L. Stuart, Melissa Fleschler Peskin, and JoAnna Elmquist. 2016. The temporal association between traditional and cyber dating abuse among adolescents. *Journal of Youth and Adolescence* 45: 340–49. [CrossRef] [PubMed]
- Van Ouytsel, Joris, Elizabeth Torres, Hye Jeong Choi, Koen Ponnet, Michel Walrave, and Jeff R. Temple. 2017a. The associations between substance use, sexual behaviors, bullying, deviant behaviors, health, and cyber dating abuse perpetration. *The Journal of School Nursing* 33: 116–22. [CrossRef] [PubMed]
- Van Ouytsel, Joris, Koen Ponnet, and Michel Walrave. 2017b. Cyber dating abuse: Investigating digital monitoring behaviors among adolescents from a social learning perspective. *Journal of Interpersonal Violence* 30: 1–22. [CrossRef] [PubMed]
- Van Ouytsel, Joris, Koen Ponnet, and Michel Walrave. 2018. Cyber dating abuse victimization among secondary school students from a lifestyle-routine activities theory perspective. *Journal of Interpersonal Violence* 33: 1–10. [CrossRef]
- Van Ouytsel, Joris, Michel Walrave, Koen Ponnet, An-Sofie Willems, and Melissa Van Dam. 2019. Adolescents' perceptions of digital media's potential to elicit jealousy, conflict and monitoring behaviors within romantic relationships. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 13: UNSP-3. [CrossRef]
- Víllora, Beatriz, Raúl Navarro, and Santiago Yubero. 2019a. The role of social-interpersonal and cognitive-individual factors in cyber dating victimization and perpetration: Comparing the direct, control, and combined forms of abuse. *Journal of Interpersonal Violence* 36: 8559–84. [CrossRef]
- Víllora, Beatriz, Santiago Yubero, and Raúl Navarro. 2019b. Associations between feminine gender norms and cyber dating abuse in female adults. *Behavioral Sciences* 9: 35. [CrossRef]
- Víllora, Beatriz, Santiago Yubero, and Raúl Navarro. 2019c. Cyber dating abuse and masculine gender norms in a sample of male adults. *Future Internet* 11: 84. [CrossRef]
- Wolford-Clevenger, Caitlin, Heather Zapor, Hope Brasfield, Jeniimarie Febres, JoAnna Elmquist, Meagan Brem, Ryan C. Shorey, and Gregory L. Stuart. 2016. An examination of the partner cyber abuse questionnaire in a college student sample. *Psychology of Violence* 6: 156–62. [CrossRef]
- Zweig, Janine M., Meredith Dank, Jennifer Yahner, and Pamela Lachman. 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: 1063–77. [CrossRef] [PubMed]
- Zweig, Janine M., Pamela Lachman, Jennifer Yahner, and Meredith Dank. 2014. Correlates of cyber dating abuse among teens. *Journal of Youth and Adolescence* 43: 1306–21. [CrossRef] [PubMed]

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