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Romantic Myths and Cyber Dating Violence Victimization in Spanish Adolescents: A Moderated Mediation Model

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Abstract

Adolescents' beliefs in romantic myths of love have been related to cyber dating violence victimization. However, these relationships could be mediated by adolescents' tolerant attitudes toward dating abuse and be different for adolescent boys and girls. A better understanding of these relationships is important for developing more effective prevention programs. Thus, the current study aimed to examine the relationships between beliefs in romantic myths and cyber dating violence victimization in adolescents, analyzing the possible mediating role of tolerant attitudes toward abuse and the possible moderator role of gender. Participants were 467 Spanish adolescents who had a romantic relationship (54.4% girls; $M_{age} = 15.09$). Results showed positive significant direct and indirect relationships, through tolerant attitudes toward abuse, between beliefs in romantic myths and cyber dating violence victimization. Gender was not a moderator variable in the direct relationships, but its moderator role was supported in the indirect relationships. Stronger positive links between romantic myths and tolerant attitudes toward abuse, and between tolerant attitudes and cyber-control victimization, were found in adolescent girls. These findings highlight the need to consider tolerant attitudes toward abuse in intervention programs designed to prevent cyber dating violence victimization in adolescents and continue to analyze gender differences in variables related to cyber dating violence victimization.

Keywords: romantic myths; cyber dating violence; victimization; tolerance toward abuse; attitudes; adolescence

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Introduction

The romantic relationships are a significant part of adolescents' social world, with a great influence on their psychosocial development (Connolly et al., 2013; Smetana et al., 2006). Although romantic experiences are scarce in early adolescence (10–13 years), most adolescents initiate a first romantic relationship during middle adolescence (14–17 years), being usual at this developmental stage (Collins, 2003). Adolescents often create strong affective bonds with their partner, feel new emotions and must cope with possible conflicts, jealousy, and insecurities (Collins et al., 2009; Furman, 2002; Helm et al., 2017). In these first romantic relationships, adolescents' notions of romance are very idealized (Connolly et al., 2013; Smetana et al., 2006), and they are very influenced in their romantic view of a dating relationship by their peer group, movies and songs, and social media (Driesmans et al., 2016; Eggermont, 2004; Hertzog & Rowley, 2014; Lippman et al., 2014). In addition, Information and Communication Technologies (ICTs) currently play an important role in adolescents' romantic relationships

(Baker & Carreño, 2016; Mosley & Lancaster, 2019; Smith et al., 2018; Van Ouytsel et al., 2019; Vaterlaus et al., 2018). These technologies facilitate the communication with the partner, increase emotional ties, and allow adolescents to express feelings. However, they also imply disadvantages and possible negative consequences.

The rapidly increasing use of ICTs has exacerbated the negative impact of dating violence by allowing partners to be abusive even when they are not together. For this reason, studies on cyber dating violence (CDV) in adolescents have been expanded in recent years (Caridade et al., 2019; Galende et al., 2020; Hinduja & Patchin, 2021; Lu et al., 2021; Stonard, 2020). CDV is defined as the use of digital technologies to control, harass, threaten, or harm a current or previous partner (Caridade & Braga, 2020; Ellyson et al., 2021; Hinduja & Patchin, 2021). The two main forms of CDV are cyber-control and cyber-aggression (Borrajo, Gámez-Guadix, Pereda, & Calvete, 2015; Cava & Buelga, 2018; Villora et al., 2019). Cyber-control includes behaviors such as constantly monitoring the partner's activity in social networks, controlling their social contacts, and demanding, for example, that they remove contacts, block friends, or delete photos. Cyber-aggression includes direct insults and threats made to the partner and spreading or threatening to spread humiliating and denigrating rumors, photos, videos, or comments about the partner on social networks.

CDV is positively related to offline dating violence (Borrajo, Gámez-Guadix, Pereda, & Calvete, 2015; Cava, Buelga, et al., 2020; Cava, Martínez-Ferrer, et al., 2020; Lu et al., 2021), but it is qualitatively different and has specific negative consequences that can be even more serious than offline aggression (Lu et al., 2021; Melander & Marganski, 2020). In the virtual space, aggression and control over the partner can be carried out at any time of day or night and from any place, with permanent access to the victim (Borrajo, Gámez-Guadix, Pereda, & Calvete, 2015; Paat & Markham, 2021; Zweig et al., 2013, 2014). In addition, social networks allow humiliating photos, comments, and videos of the partner to be quickly spread to large numbers of people, increasing the victim's feelings of helplessness due to being unable to control the personal information being disseminated (Hellevik, 2019; Stonard, 2020). The humiliating photos or information can quickly reach a broad social network with minimal effort, thus producing a faster and greater impact on different spheres of the victim's life (Stonard, 2020; Walrave et al., 2020). This information can remain online for a long time, or even permanently, and it can be forwarded and cause re-victimization situations (Hellevik, 2019). Experiences of CDV have a serious negative impact on the victim, and they have been related to depressive symptoms, anxiety, emotional distress, feelings of loneliness, low self-esteem, and greater suicide risk (Caridade et al., 2019; Hancock et al., 2017; Melander & Marganski, 2020; Wright, 2016).

Furthermore, previous studies have observed a high prevalence of CDV in adolescent couples (Caridade et al., 2019; Cava, Martínez-Ferrer, et al., 2020; Stonard et al., 2014). In their review, including studies conducted in US, Canada, the UK, Europe, and New Zealand, Stonard et al. (2014) found that between 12 and 56% of adolescents had experienced some form of CDV victimization. In US, Cutbush et al. (2012) reported that 56% of adolescents had experienced some form of electronic dating violence, Zweig et al. (2013) observed a percentage of 26% and more recently Hinduja and Patchin (2021) found a prevalence of 28% in students from 12 to 17 years old. Considering the type of victimization, the cyber-control behaviors are considerably more frequent than cyber-aggression behaviors (Caridade et al., 2019; Ellyson et al., 2021; Linares et al., 2021; Rodríguez-deArriba et al., 2021; Zweig et al., 2013). In Spain, Borrajo, Gámez-Guadix, Pereda and Calvete (2015) reported a prevalence of 75% for cyber-control victimization and 14% for cyber-aggression victimization. In a similar line, Caridade et al. (2019) found in a study carried out in Portugal higher rates of cyber-control victimization (65%–75%) compared to cyber-aggression victimization (10.6%). This higher prevalence of cyber-control behaviors in adolescent couples has been associated with less awareness of these behaviors as a form of abuse. In this regard, previous studies have found a relationship between adolescents' beliefs in some romantic myths linking love with jealousy and control and their greater involvement in CDV, especially cyber-control behaviors (Borrajo, Gámez-Guadix, & Calvete, 2015; Cava, Buelga, et al., 2020; Villora et al., 2019).

Romantic Myths of Love and Cyber Dating Violence Victimization

Romantic myths of love are socially accepted beliefs about how romantic relationships should be, including the behaviors that are expected in these relationships and their relevance in being happy (Ferrer & Bosch, 2013; Driesmans et al., 2016; Martín-Salvador et al., 2021). These romantic myths of love include believing that romantic love is necessary to be happy, viewing jealousy as a sign of love, believing that love can cope with all kinds of difficulties, perceiving love as suffering, and thinking that everyone has a soul mate who is their only one true love (Driesmans et al., 2016; Rodríguez-Castro et al., 2013). Adolescents have largely internalized these romantic myths

through socialization processes and the influence of peers, songs, TV series, and social media (Bonomi et al., 2014; Eggermont, 2004; Hefner & Wilson, 2013; Lippman et al., 2014). The influence of TV series, reality TV programs and social media in adolescents' beliefs about romantic relationships have been analyzed in studies carried out in different countries, such as Belgium (Driesmas et al., 2016), Australia (Taba et al., 2020) and the UK (Porter & Standing, 2020). This idealized concept of romantic relationships begins to be elaborated during childhood, especially through the mass media (Bachen & Illouz, 1996; Hefner et al., 2017). Previous studies analyzing the content of Disney movies have revealed that most movies include references to "love at first sight" and "happily ever after" (Hefner et al., 2017; Tanner et al., 2003). These romantic beliefs about love, developed during childhood and adolescence, are later used to assess what behaviors are appropriate in a romantic relationship (Lamy, 2016).

The belief in romantic myths of love is frequent in adolescents' first dating relationships, decreasing their awareness of some abusive behaviors as a form of dating violence (Carrascosa et al., 2019; Nardi-Rodríguez et al., 2018; Ruiz-Palomino et al., 2021a, 2021b). The adolescents' romantic beliefs include an idealized representation of dating relationships, considering that love can overcome all barriers, the conviction that there is only one true love, and the idea of love at first sight (Driesmans et al., 2016; Sprecher & Metts, 1999). With these idealized romantic views of dating relationships in mind, adolescents may interpret some of their partners' online control behaviors as normal, seeing partners' jealousy and control behaviors as part of love, and tolerating some online abusive behaviors because they think that their partner is their only one true love. Thus, a greater internalization of these romantic myths could increase their vulnerability to experiencing CDV. At this regard, Cava, Buelga, et al. (2020) found that those adolescents who more believed in the romantic myths of love reported being exposed to more cyber-aggression and cyber-control victimization. However, cyber-control and cyber-aggression behaviors can cause great suffering for the victim (Hellevik, 2019), and more knowledge about how these myths are related to CDV victimization in adolescents is needed. A key variable that could mediate the relationship between adolescents' beliefs in romantic myths and CDV victimization might be their tolerant attitudes toward abuse in romantic relationships.

The Mediating Role of Tolerant Attitudes Toward Abuse

Socio-cognitive theories can contribute to understanding the connections between adolescents' beliefs in romantic myths and CDV victimization, by pointing out the important role of attitudes. According to socio-cognitive frameworks, such as the Theory of Reasoned Action and the Theory of Planned Behavior (Ajzen, 1991, 2020; Azjen & Fishbein, 1980; Fishbein & Ajzen, 2010), the attitudes toward a particular behavior (e.g., the degree to which this behavior is positively or negatively evaluated) are considered essential in explaining the behavior itself. The Theory of Planned Behavior adds, with respect to the Theory of Reasoned Action, the evaluation of the perceived behavioral control to predict the behavior performed (Ajzen, 2020). However, both theories strongly connect attitudes with behaviors, and highlight how cognitive aspects (beliefs about the attitudinal object) contribute to the elaboration of specific attitudes. From these theories, beliefs are antecedents of attitudes and have a great weight in their development. Following these theoretical approaches, adolescents' beliefs in romantic myths of love would influence their tolerant attitudes toward some abusive behaviors related to these romantic myths, and these tolerant attitudes could increase their risk of experiencing CDV victimization.

These socio-cognitive frameworks have been used primarily to explain how justifying and tolerant attitudes toward abuse are related to dating violence perpetration (for example, Borrajo, Gámez-Guadix, & Calvete, 2015; Courtain & Glowacz, 2021; Fernández-González et al., 2018; VÍllora et al., 2019). Nevertheless, tolerant attitudes toward abuse can contribute to explaining not only violence perpetration, but also situations of dating violence victimization. Adolescents' attitudes of acceptance and tolerance toward some online abusive behaviors in their romantic relationships could help to explain why they remain in dating relationships where they experience CDV. In this regard, VÍllora et al. (2019) observed positive and significant relationships between attitudes justifying the use of violence in romantic relationships and CDV victimization. However, the links between adolescents' romantic beliefs and tolerant attitudes toward abuse need to be explored. The possible mediating role of tolerant attitudes toward abuse in the relationship between beliefs in romantic myths and CDV has not yet been analyzed.

In addition, another question that should be analyzed is whether the possible mediating role of tolerant attitudes toward abuse in the relationship between romantic myths and CDV is similar or different for cyber-control and cyber-aggression victimization. Previous studies have related attitudes justifying the use of violence in dating relationships to both cyber-control and cyber-aggression victimization (VÍllora et al., 2019). However, because romantic myths associate being truly in love with controlling what the partner does, and digital technologies

provide ample opportunities to exercise this control while normalizing these online behaviors among adolescents, the mediating role of tolerant attitudes toward abuse may be stronger for cyber-control victimization.

The Moderator Role of Gender

The proposed relationships among romantic myths, tolerant attitudes toward abuse, and CDV victimization might be moderated by gender, given that some differences have been observed between adolescent boys and girls in their beliefs in the romantic myths of love. In a study carried out in Spain, adolescent girls showed greater acceptance of the romantic myth of the omnipotence of love, whereas, compared to girls, adolescent boys were more in agreement with the romantic myths of jealousy as a sign of love and the possible coexistence of love and abuse in a romantic relationship (Rodríguez-Castro et al., 2013). These gender differences might mean that there are also differences in their tolerance toward some online abusive behaviors, as well as in the links between their beliefs in romantic myths and tolerant attitudes toward abuse. Currently, a growing body of literature are beginning to analyze how gender is related to these variables, but further research is necessary.

In addition, another important issue is the possible differential influence of the socio-cultural context on adolescent girls and boys. For example, some expectations about dating relationships and family norms about this may be different for adolescent boys and girls in specific socio-cultural contexts. Although this issue has hardly been considered in previous research, some studies have pointed to interactions between gender and culture. Gender is a social construction based on the roles and behaviors socially assigned to boys and girls (Ferrer & Bosch, 2013), and cultural differences in the social construction of gender have been observed. Furthermore, there are also some specific cultural values that seem to have a different influence on boys and girls. Li et al. (2010) found that gender was a moderating variable of cultural differences in adolescents' romantic relationships in China and Canada, and Tyrell et al. (2014) observed that gender plays a significant role in the associations between family values and adolescents' romantic relationships. In socio-cultural contexts in which traditional gender roles are more valued, parents treat their sons and daughters differently, expect their daughters to emphasize family more and they exert more control over them in their first dating relationships (Tyrell et al., 2014). In southern European countries, such as Portugal, Greece, Italy and Spain, family values are of great importance (Tavora, 2012), and some romantic myths that point out the importance of having a romantic relationship to be happy could have a greater influence in adolescent girls.

Gender differences could also be present in the relationships among romantic myths, tolerant attitudes and CDV victimization. In a prior study, stronger correlations between beliefs in romantic myths and both cyber-control and cyber-aggression victimization in adolescent girls than in boys were observed (Cava, Buelga, et al., 2020). However, the possible moderator role of gender in the relationships between romantic myths and tolerant attitudes, and between these attitudes and CDV victimization has not been previously analyzed. A better understanding of the moderator role of gender in all these relationships could be useful for the development of prevention strategies in early and middle adolescence. Therefore, in this study it was considered convenient to explore the moderator role of gender when analyzing the direct and indirect relationships between romantic myths and CDV victimization in adolescents.

The Current Study

The objective of this study was to delve into the relationships between romantic myths and CDV victimization in a sample of Spanish adolescents. More specifically, to analyze the direct and indirect relationships between romantic myths and CDV victimization (cyber-control and cyber-aggression), testing the possible mediating role of tolerant attitudes toward abuse. In addition, the moderator role of gender in these relationships was also tested. The proposed models (see Figure 1 and Figure 2) hypothesized a positive direct relationship between romantic myths of love and CDV victimization (cyber-control and cyber-aggression), and a positive indirect relationship through adolescents' tolerant attitudes toward abuse. Regarding the moderator role of gender, we hypothesized that, in adolescent girls, compared to boys, there would be greater links between romantic myths and tolerant attitudes toward abuse, and between these tolerant attitudes and both cyber-control and cyber-aggression victimization.

Methods

Participants

This study is included in broader research on psychosocial adjustment in adolescence. The participants were selected by cluster sampling, with the sampling units being secondary schools. The required sample size—with a sampling error of $\pm 3\%$, a confidence level of 90%, and $p = q = 0.5$, ($N = 281,135$)—was estimated at 745 students. Three public secondary schools with different sizes and located in different areas of Valencian region (eastern Spain) were randomly selected. The three schools initially contacted agreed to participate in this study, and the initial sample consisted of 861 adolescent boys and girls, from 13 to 18 years old ($M_{\text{age}} = 14.90$, $SD = 1.47$). All these adolescents filled out different instruments that measured some variables related to psychosocial well-being, as well as their beliefs about romantic love and their tolerant attitudes toward abuse in dating relationships. Lastly, the adolescents were asked whether they were currently in a dating relationship or had been in one in the previous 12 months. Only those adolescents who indicated having or having had a dating relationship filled out the cyber dating violence scale.

Based on the requirement of having or having had a dating relationship, the number of participants was reduced to 467 adolescents ($M_{\text{age}} = 15.09$, $SD = 1.46$). Post hoc power calculation indicates that with this final sample ($n = 467$) we should have enough statistical power to detect relevant relationships between the model variables. According to sample size and statistical power calculations in multiple regressions, assuming a small effect size ($f^2 = 0.03$) for a maximum number of predictors (5) and an alpha level of .05, in order to attain a statistical power level of .80, the required sample size would be 434 (Faul et al., 2009). As indicated, the study sample was composed of 467 students, thus, larger than the required to attain an adequate power level. This sample of adolescents consisted of 213 boys (45.6%, $M_{\text{age}} = 15.20$, $SD = 1.47$) and 254 girls (54.4%, $M_{\text{age}} = 15.00$, $SD = 1.45$). These adolescents were 13 (17%), 14 (21.6%), 15 (21.1%), 16 (19.7%), 17 (15.6%), and 18 years old (4.5%). Most adolescents participating in this study (78.2%) were in middle adolescence. The mean age of their partners was 15.77 ($SD = 2.37$). Most of these adolescents indicated that their current or most recent dating relationship had lasted for one to six months (50.7%), whereas 18.2% reported that their dating relationships had lasted less than one month, 14.1% between six and 12 months, and 16% more than one year.

Procedure

We contacted the heads of the three schools by phone to inform them about this study and invite them to attend a meeting to explain the objectives in detail. In this meeting, the teachers received detailed information about our research, and their collaboration was requested. These three schools agreed to participate in this research. The families of these students were informed about the objectives by letter and in a meeting. Families were also informed about the confidentiality of the data obtained and that their children's participation was voluntary. After that, they were asked to give their consent for their children to participate. Parents who did not wish their children to participate had two weeks to inform the school on a form that was attached to the information letter. Only 1% parents denied their children permission to participate. The APA (2010) ethical principles and code of conduct were followed, and this study was approved by the Ethics Committee of the University of Valencia (Protocol Number: H1456762885511). The students completed the scales in their usual classrooms, during a regular class time (in a 55-minute session), with members of the research team present for adequate data collection. This pen and paper data collection was carried out during November and December 2019. Prior to filling out the scales, adolescents were informed by a member of the research team that their data would be confidential, their participation would be voluntary, and they could drop out of the study at any time. The cyber dating violence scale was the last one answered by the students. Just prior to this scale, they were asked whether they were in a romantic relationship at that time or in the previous 12 months. Those adolescents who indicated that they did not have (or had not had) a romantic relationship were informed that their participation had ended, and they were thanked for their collaboration. They waited a few minutes in the classroom while their classmates filled out this last scale.

Measures

The instruments used to measure the variables included in this study are shown in the Appendix and are described below.

Romantic Myths of Love

The Myths of Romantic Love Scale (Carrascosa et al., 2019) was used to measure adolescents' beliefs in romantic myths. This Spanish scale includes seven items that evaluate adolescents' beliefs in some romantic myths about love. Specifically, the following romantic myths: Jealousy is a sign of love (Item 1: *Jealousy is proof of love*; Item 2: *When my partner controls me, he/she shows me his/her love*); love and violence are compatible in a couple relationship (Item 3: *If he/she loves me, he/she will make me cry*; Item 6: *You can mistreat someone you love*); love is omnipotent and can face all difficulties (Item 4: *If I show him/her that I love him/her, he/she will change and make me happy*); it is necessary to have a partner to be happy (Item 5: *Separating from one's partner is a failure*); and there is only one soul mate to fall in love with (Item 7: *We all have a single ideal partner, our 'soul mate'*). Adolescents were asked to respond to these items using a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). In this sample, the reliability of this scale (Cronbach's alpha) was .75.

Tolerant Attitudes Toward Abuse

The Attitudes of Tolerance toward Abuse in Romantic Relationships Scale (Cava et al., 2022) was used to measure adolescents' tolerant attitudes toward this abuse. This Spanish scale consists of 11 items that describe different situations of aggression, manipulation, or control by the partner. Adolescents answered these items by indicating the extent to which they could forgive their partner for these behaviors (e.g., *make you cry, control your WhatsApp, insult you, not let you go out with friends, tell you what clothes to wear, lie to you*), with four possible response options: 1 (*never*), 2 (*once*), 3 (*several times*), 4 (*many times*). This scale showed a reliability (Cronbach's alpha) of .85 in this sample.

Cyber Dating Violence Victimization

The Cyber-Violence Scale in Adolescent Couples (Cava & Buelga, 2018) was used to measure cyber dating violence victimization. This Spanish scale is composed of two subscales: Cyber-victimization (10 items) and Cyber-violence perpetrated (10 items). In this study, given the proposed objective, only the Cyber-victimization subscale was used. This subscale describes different aggressive and controlling behaviors their partners may have perpetrated against them using digital technology. The 10 items on this subscale are integrated into two factors: Cyber-aggression, with five items (threats and insults through social media, e.g., *My partner has insulted or threatened me privately; My partner has made public comments about me on the Internet and in WhatsApp groups that made me feel bad*); and Cyber-control, with five items (excessive control behaviors, e.g., *My partner has made me delete or block friends from my networks or mobile phone, so that I have not contact with them; My partner gets angry if he/she sees that I am online and I don't answer him/her right away*). To answer these items, adolescents indicated the frequency with which their partner had performed these behaviors using a four-point Likert scale: 1 (*never*), 2 (*seldom*), 3 (*sometimes*), and 4 (*often*). In this sample, the internal consistency (Cronbach's alpha) of these two subscales was .91 and .84, respectively.

The final score for the variables included in the model (romantic myths, attitudes of tolerance toward abuse, cyber-control victimization, cyber-aggression victimization) was computed as the mean value of the responses to the items corresponding to scale measuring each variable.

Data Analysis

Descriptive statistics (means and standard deviations), Cronbach alpha coefficients for the total sample, percentage of adolescents reporting of having experience cyber-control and cyber-aggression victimization, and Pearson correlations separately by gender were estimated using SPSS 26. A hypothesis contrast test was performed using the Fisher r to z transformation to examine whether the correlations between the study variables were similar in both genders. The percentage of missing data was very small ($< 0.001\%$). Subjects with missing

data were not included in the analyses. Concretely, 2 students were removed, which represented a 0.43% of the sample. Model 4 in SPSS macro PROCESS compiled by Hayes (2022) was used to examine the mediating role of tolerant attitudes toward abuse in the relationship between romantic myths and cyber control and cyber aggression violence victimization (see Figure 1). To examine the moderating role of gender in the direct and indirect associations between romantic myths and CDV victimization through tolerant attitudes toward abuse, two moderated-mediation regression models, one for each outcome variable (i.e., cyber-control and cyber-aggression victimization) were run (see Figure 2). These moderated mediation models were estimated using Model 59 in SPSS macro PROCESS. The bootstrapping method based on 5,000 samples was used to estimate the standard errors and 95% confidence intervals for the indirect effects. If the confidence interval does not include zero, the null hypothesis of no mediation is rejected, providing empirical support for the indirect effect (Hayes, 2022). Furthermore, standard simple slope analyses were conducted to interpret the significant interaction effects when testing the moderator role of gender.

Before testing the mediation model (Model 4) and the moderated-mediation regression model (Model 59), we tested models' assumptions for the two regression equations involved in Model 4 and Model 59 (and considering the separate models that were run for each of the DVs, cyber-control and cyber-aggression). Results indicated that all the assumptions were met for Model 4 and for Model 59.

Results

The prevalence of CDV victimization in this sample was as follows: 60.2% of adolescents reported having experienced cyber-control victimization in their romantic relationship, and 17% cyber-aggression victimization. Means and standard deviations of all the analyzed variables for the total sample and correlations separately by gender are displayed in Table 1. Positive correlations among all the analyzed variables were found in both girls and boys.

Table 1. Descriptive Statistics and Bivariate Correlations.

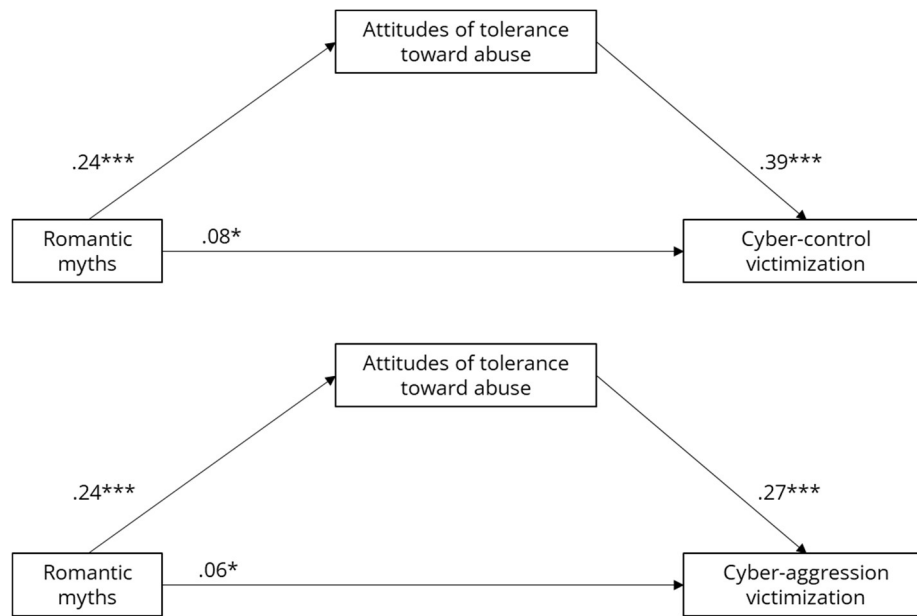
Variable	Range	<i>M</i>	<i>SD</i>	1	2	3	4
1. Romantic myths	1-5	1.97	0.69	—	.16*	.15*	.15*
2. Attitudes of tolerance toward abuse	1-4	1.50	0.47	.44**	—	.31**	.25**
3. Cyber-control victimization	1-4	1.37	0.53	.27**	.46**	—	.73**
4. Cyber-aggression victimization	1-4	1.12	0.41	.20**	.48**	.50**	—

Note. Boys' correlations are above the diagonal. ** $p < .01$, * $p < .05$.

The results for the gender differences in the correlations showed that there were significant differences in three of the six studied relationships. The correlations between romantic myths and attitudes of tolerance toward abuse ($z = -3.32$; $p = .002$) and the correlations between attitudes of tolerance toward abuse and cyber-aggression victimization ($z = -2.85$; $p = .007$) were higher in girls than in boys. By contrast, the correlation between cyber-control victimization and cyber-aggression victimization ($z = 4.05$; $p < .001$) was higher in boys than in girls. Finally, the gender differences in the correlations between romantic myths and cyber-control victimization ($z = -1.34$; $p = .163$) and cyber-aggression victimization ($z = -0.55$; $p = .343$), and between attitudes of tolerance toward abuse and cyber-control victimization ($z = -1.89$; $p = .067$), were not significant.

As Figure 1 and Table 2 show, romantic myths were positively correlated with attitudes of tolerance toward abuse and CDV victimization (i.e., cyber-control and cyber-aggression). Attitudes of tolerance toward abuse were positively correlated with cyber-control and cyber-aggression victimization. The indirect relationships between romantic myths and cyber-control and cyber-aggression victimization, through attitudes of tolerance toward abuse, were significant ($B = 0.09$, $SE = 0.03$, 95% CI [0.04, 0.15] and $B = 0.06$, $SE = 0.03$, 95% CI [0.18, 0.12], respectively). The models explained 12% of the variance in attitudes of tolerance toward abuse, 15% of the variance in cyber-control victimization, and 13% of the variance in cyber-aggression victimization.

Figure 1. Unstandardized Solution of the Hypothesized Model of the Relationships Between Romantic Myths, Attitudes of Tolerance Toward Abuse and Cyber Dating Violence Victimization (Cyber-Control and Cyber-Aggression).



Note. *** $p < .001$; * $p < .05$.

Table 2. Results of the Mediation Models.

Predictors	Attitudes of tolerance toward abuse			Cyber-control victimization			Cyber-aggression victimization		
	<i>B</i> (<i>SE</i>)	95% CI	<i>p</i>	<i>B</i> (<i>SE</i>)	95% CI	<i>p</i>	<i>B</i> (<i>SE</i>)	95% CI	<i>p</i>
Romantic myths	0.24 (0.03)	[0.18, 0.29]	< .001	0.08 (0.03)	[0.01, 0.15]	.017	0.06 (0.03)	[0.03, 0.11]	.040
Attitudes of tolerance toward abuse				0.39 (0.05)	[0.28, 0.49]	< .001	0.27 (0.04)	[0.19, 0.35]	< .001
<i>F</i>				$F(2, 461) = 41.98^{***}$			$F(2, 461) = 33.49^{***}$		

Note. *** $p < .001$.

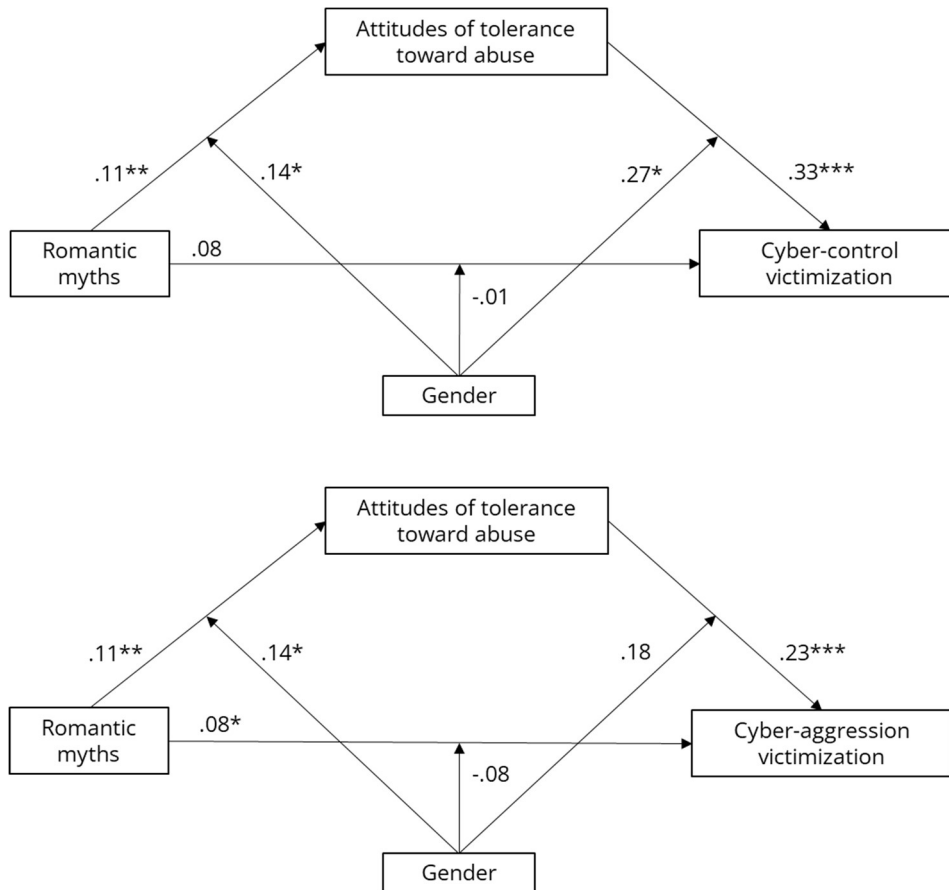
Table 3. The Moderating Role of Gender in the Mediation Models.

Predictors	Attitudes of tolerance toward abuse			Cyber-control victimization			Cyber-aggression victimization		
	<i>B</i> (<i>SE</i>)	95% CI	<i>p</i>	<i>B</i> (<i>SE</i>)	95% CI	<i>p</i>	<i>B</i> (<i>SE</i>)	95% CI	<i>p</i>
Romantic myths	0.11 (0.04)	[0.04, 0.19]	.003	0.08 (0.04)	[-0.01, 0.17]	.080	0.08 (0.03)	[0.01, 0.15]	.032
Attitudes of tolerance toward abuse	—	—	—	0.33 (0.06)	[0.20, 0.45]	< .001	0.23 (0.05)	[0.13, 0.32]	< .001
Gender	-0.28 (0.04)	[-0.36, -0.20]	< .001	0.04 (0.05)	[-0.05, 0.15]	.378	-0.00 (0.04)	[-0.08, 0.08]	.980
Romantic myths x gender	0.14 (0.06)	[0.02, 0.26]	.025	-0.01 (0.07)	[-0.16, 0.14]	.887	-0.08 (0.06)	[-0.20, 0.04]	.181
Attitudes of tolerance toward abuse x gender	—	—	—	0.27 (0.13)	[0.02, 0.52]	.031	0.18 (0.10)	[-0.02, 0.37]	.074
<i>F</i>	$F(3, 460) = 41.10^{***}$			$F(5, 458) = 17.99^{***}$			$F(5, 458) = 14.18^{***}$		

Note. *** $p < .001$

Inspection of the moderated mediation model (see Table 3 and Figure 2) for cyber-control and cyber-aggression victimization revealed that the moderated effect of gender on the relationship between romantic myths and cyber-control victimization was not significant ($B = -0.01$, $p = .887$). Furthermore, the moderated effect of gender on the relationship between romantic myths and cyber-aggression victimization was not statistically significant either ($B = -0.08$, $p = .181$).

Figure 2. Unstandardized Solution of the Hypothesized Model of the Relationships Between Romantic Myths, Attitudes of Tolerance Toward Abuse and Cyber Dating Violence Victimization (Cyber-Control and Cyber-Aggression) Moderated by Gender.

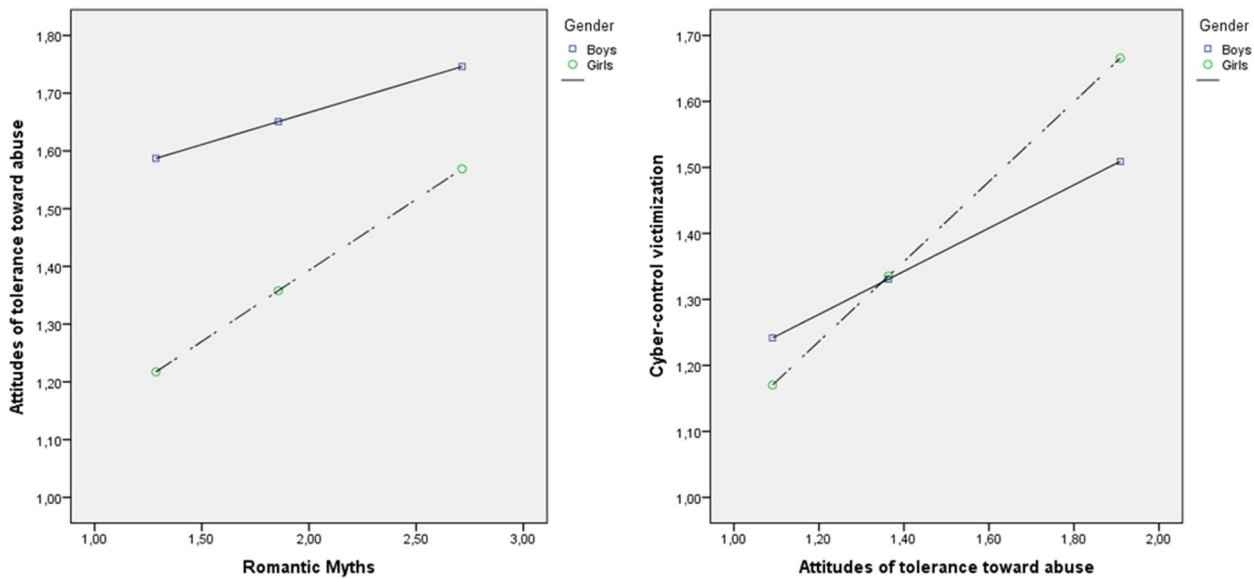


Note. *** $p < .001$; ** $p < .01$; * $p < .05$.

Table 3 and Figure 2 also show that gender moderated the relationship between romantic myths and attitudes of tolerance toward abuse ($B = 0.14$, $p = .025$). Figure 3a shows that, for both boys and girls, romantic myths were positively related to attitudes of tolerance toward abuse (boys: $B = 0.11$, $SE = 0.04$, 95% CI [0.04, 0.19], and girls: $B = 0.25$, $SE = 0.05$, 95% CI [0.16, 0.34]). Results show that the slope was steeper for girls than for boys, suggesting that this relationship was stronger in girls than in boys. Furthermore, Table 3 and Figure 2 show that gender moderated the relationship between attitudes of tolerance toward abuse and cyber-control victimization ($B = 0.27$, $p = .031$). As Figure 3b reveals, for both boys and girls, attitudes of tolerance toward abuse were positively related to cyber-control (boys: $B = 0.33$, $SE = 0.06$, 95% CI [0.20, 0.45], and girls: $B = 0.60$, $SE = 0.11$, 95% CI [0.38, 0.82]). Again, the figure plots show that the slopes were steeper for girls than for boys, suggesting that attitudes of tolerance toward abuse had a stronger relationship with cyber-control victimization in girls than in boys. Finally, the moderated effect of gender on the relationship between attitudes of tolerance toward abuse and cyber-aggression victimization was not significant ($B = 0.18$, $p = .074$; see Table 3 and Figure 2).

Results of the moderated mediation analysis supported the moderator role of gender in the indirect relationship between romantic myths and cyber-control victimization through attitudes of tolerance toward abuse. Specifically, the mediated relationship was significant for boys ($B = 0.04$, $SE = 0.02$, 95% CI [0.01, 0.08]), and for girls ($B = 0.15$, $SE = 0.06$, 95% CI [0.04, 0.28]). That is, for both boys and girls, a greater belief in romantic myths was associated with higher attitudes of tolerance toward abuse, which in turn was associated with more cyber-control victimization. Additionally, results of the moderated mediation analysis supported the moderator role of gender in the indirect relationship between romantic myths and cyber-aggression victimization through attitudes of tolerance toward abuse. However, surprisingly, the mediated relationship was not significant for boys ($B = 0.03$, $SE = 0.02$, 95% CI [-0.01, 0.06]) or for girls ($B = 0.10$, $SE = 0.07$, 95% CI [-0.01, 0.25]). The models explained 21% of the variance in attitudes of tolerance toward abuse, 16% of the variance in cyber-control victimization, and 13% of the variance in cyber-aggression victimization.

Figure 3. Associations Between Romantic Myths, Attitudes of Tolerance Toward Abuse, and Cyber-Control Victimization as a Function of Gender.



Discussion

The objective of this study was to analyze the direct relationship between romantic myths of love and CDV victimization (cyber-control and cyber-aggression), as well as the indirect relationship through tolerant attitudes toward abuse, in a sample of Spanish adolescents. The results of this study confirmed direct positive relationships between romantic myths and both types of CDV victimization (cyber-control and cyber-aggression) in adolescents, in line with previous studies (Carrascosa et al., 2019; Cava, Buelga, et al., 2020; Víllora et al., 2019). Furthermore, indirect positive relationships between romantic myths and CDV victimization through adolescents' attitudes of tolerance towards abuse were found, and the moderator role of gender in these indirect relationships was observed.

Many adolescents believe in the romantic myths of love, transmitted through songs, movies, TV series, social media, and their peers, which leads them to develop certain scripts about how their first romantic relationships should be (Bonomi et al., 2014; Driesmans et al., 2016; Eggermont, 2004; Ferrer & Bosch, 2013; Hefner et al., 2017; Martín-Salvador et al., 2021; Masanet et al., 2018). These romantic beliefs are developed during childhood and adolescence, through the socialization process, and they are strongly internalized when adolescents begin their first dating relationships (Hefner et al., 2017; Lamy, 2016; Tanner et al., 2003). Because these romantic myths include viewing jealousy and control as a sign of love, believing in the omnipotence of love, and associating love with suffering (Rodríguez-Castro et al., 2013; Ruiz-Palomino et al., 2021a, 2021b; Tanner et al., 2003), they might be linked with a lower perception of some cyber-control behaviors as abusive behaviors. Thus, certain behaviors carried out by their partner, such as asking for their passwords, checking their chats, using social networks to control who they are with and where, or even requiring them to block contacts from their social networks or delete photos from their profile, could be interpreted as normal behaviors in a dating relationship. These romantic beliefs could increase their risk of experiencing cyber-control victimization. Regarding cyber-aggression victimization, romantic myths of love could be associated to this type of CDV in a similar way. Adolescents' beliefs in romantic myths could be a risk factor because some online aggressive behaviors by their partner, such as online threats and insults, could also become normalized or underestimated. In this regard, adolescents' beliefs in romantic myths have previously been highlighted as a risk factor for CDV victimization (Borrajó, Gámez-Guadix, & Calvete, 2015; Caridade & Braga, 2020; Víllora et al., 2019).

Nevertheless, the results of this study supported not only direct relationships, but also significant indirect relationships between romantic myths and CDV victimization (cyber-control and cyber-aggression) through adolescents' attitudes of tolerance toward abuse. Since socio-cognitive theoretical approaches, the significant role of attitudes in explaining behaviors related to these attitudes have been highlighted, and prior studies have related adolescents' attitudes of acceptance and justification of dating violence to their greater involvement in aggressive and controlling online behaviors in romantic relationships (Borrajó, Gámez-Guadix, & Calvete, 2015; Caridade et al., 2019; Caridade & Braga, 2020; Linares et al., 2021; Víllora et al., 2019). In this regard, the results of this study

supported the existence of strong positive links between adolescents' tolerant attitudes toward abuse and CDV victimization. However, in addition, an interesting and novel finding was that these attitudes were also a significant mediating variable in the relationships between adolescents' beliefs in romantic myths of love and CDV victimization (cyber-control and cyber-aggression). That is, the results showed that adolescents' romantic beliefs about love were positively related to their tolerant attitudes toward abuse in their dating relationships, and these attitudes in turn were positively related to both cyber-control and cyber-aggression victimization. Therefore, these tolerant attitudes are especially relevant in understanding how romantic myths are associated with CDV victimization, and they should be included in intervention programs designed to prevent this cybervictimization in adolescents.

These prevention programs should largely focus on teaching adolescents to be aware of tolerant attitudes toward abuse that they may be holding in their dating relationships when using digital technologies. ICTs greatly facilitate control behaviors, easily generate jealousy and conflicts, and can contribute to normalizing controlling and abusive behaviors in dating relationships (Stonard, 2020; Van Ouytsel et al., 2019; Vaterlaus et al., 2018). For this, it is important to implement prevention programs from educational contexts to teach adolescents to identify tolerant attitudes toward abuse in their dating relationship, as well as to learn to identify them in many popular songs, movies, and TV series. At this regard, the study carried out by Porter and Standing (2020) highlighted how some reality TV programs, such as 'Love Island' in the UK, can be used to discuss with adolescents about the models of romantic relationships shown on these programs. Other previous studies have also highlighted the importance of adolescents develop healthier concepts about love for preventing offline and online dating violence (Cava et al., 2022; Hielscher et al., 2021; Lee & Wong, 2022). Both unhealthy beliefs and attitudes, which may increase the risk of CDV victimization, need to be included into these prevention programs.

Regarding gender, its moderator role was not supported in the direct relationships between romantic myths and CDV victimization. The existence of a similar direct effect of romantic myths on both types of CDV victimization (cyber-control and cyber-aggression) in adolescent boys and girls underlines the relevance of these myths in better understanding why many adolescent boys and girls maintain dating relationships in which they experience controlling and aggressive online behaviors from their partner. Although there are some gender differences in the specific romantic myths accepted by boys and girls (Rodríguez-Castro et al., 2013; Ruíz-Palomino, 2021a, 2021b), a greater belief in these myths similarly increases their vulnerability to cyber-control and cyber-aggression victimization. In addition, these results provide support for universal prevention programs for adolescent boys and girls, where they analyze their beliefs in romantic myths of love and their concept of ideal love (Galende et al., 2020).

However, although the moderator role of gender was not supported in the direct relationships between romantic myths and CDV victimization (cyber-control and cyber-aggression), a moderator role of gender was observed in the indirect relationships between these variables. In the case of cyber-control victimization, the results showed, on the one hand, that tolerant attitudes toward abuse was a significant mediating variable for adolescent boys and girls, again highlighting the significant role of these attitudes in both boys and girls. On the other hand, the results also showed that the links between romantic myths and tolerant attitudes toward abuse and between these attitudes and cyber-control victimization were stronger in adolescent girls than in boys. These stronger links between these variables in adolescent girls could be explained by the theory of differential socialization (Ferrer & Bosch, 2013). A gendered differential socialization (Ferrer & Bosch, 2013; Rodríguez-Castro et al., 2013) gives more relevance to the private and relational sphere of adolescent girls in developing their identity, compared to the greater relevance of personal and professional fulfillment in adolescent boys. This difference could lead girls to give more importance to having a partner, in addition to internalizing some romantic myths and tolerating some online controlling behaviors from their partner to a greater extent. In addition, some specific characteristics of the socio-cultural context could also be influencing these observed gender differences. Some characteristics of South European countries, such as Spain, where a great value is placed on the family (Tavora, 2012), and some traditional gender roles are maintained regarding romantic relationships, could also contribute to adolescent girls being more tolerant than boys with these controlling behaviors in their dating relationship. More extensive research, with adolescents from different countries and cultures, is needed to delve into how gender and culture may be interacting to increase the risk of this type of cybervictimization.

Regarding the indirect relationships between romantic myths and cyber-aggression victimization, the moderator role of gender was also supported because a stronger link was found between romantic myths and tolerant attitudes toward abuse in adolescent girls, compared to boys. However, when the conditional indirect effect was further explored, an unexpected result was that the indirect relationship did not appear to be statistically

significant in adolescent boys or girls. This specific result could be due to problems with the power of the test in smaller samples of boys and girls when they are considered separately. Nevertheless, future studies should more deeply analyze possible differences in the mediating role of tolerant attitudes toward abuse in cyber-control and cyber-aggression victimization. The higher prevalence of cyber-control behaviors in adolescent couples, compared to cyber-aggressions (Borrajo, Gámez-Guadix, & Calvete, 2015; Caridade et al., 2019; Caridade & Braga, 2020; Linares et al., 2021), could contribute to normalizing these online behaviors and having a greater tolerance to them. In addition, adolescents constantly upload personal information and photos to social networks, and monitoring what other people do is common among adolescents and young people (Stonard, 2020), which may contribute to the perception of these online behaviors as more common and less severe (Sánchez-Jiménez et al., 2021).

Given that the first romantic relationships have a great influence on the psychosocial development of adolescents (Collins et al., 2009), and that they extensively use digital technologies to initiate, maintain, and end romantic relationships (Belotti et al., 2022; Galende et al., 2020; Tienda et al., 2022; Vaterlaus et al., 2018), it is necessary to teach them to use these technologies more appropriately in their romantic relationships. CDV has serious negative consequences for adolescents (Lu et al., 2021; Melander & Marganski, 2020), and many of them experience this cyber violence anytime and anywhere, thus increasing their feelings of helplessness and vulnerability (Hellevik, 2019; Paat & Markhan, 2021; Stonard, 2020). Therefore, there is a clear need to make adolescents aware of their tolerant attitudes toward online abusive behaviors in their dating relationships, help them better identify controlling and abusive online behaviors, and provide them with healthy models of romantic relationships. Prevention programs aimed at promoting healthy romantic relationships in adolescents can greatly contribute to adolescents' well-being and prevent future problems in adulthood (Hielscher et al., 2021). In the technological world where they currently develop their social relationships (Belotti et al., 2022; Navarro et al., 2021; Tienda et al., 2022; Vaterlaus et al., 2018), it is essential to educate adolescents about the consequences of their online behaviors so that they can use these technologies appropriately.

Limitations and Future Perspectives

A first limitation of this study is its cross-sectional nature, which does not allow us to establish causal relationships between the analyzed variables. Although romantic beliefs begin to develop in childhood, early dating experiences may also influence adolescents' beliefs and attitudes about romantic relationships. That is, the experiences lived by adolescents in their first dating relationships (including possible experiences of cybervictimization) could also influence their romantic beliefs and tolerant attitudes. For this reason, we must be very cautious with our claims about the influences between variables in the proposed models, as highlighted by Rohrer et al. (2022). In addition, there are some interesting variables that have been not considered, such as social norms in the peer group about accepting aggressive and controlling online behaviors in romantic relationships. These social norms and the frequency of abusive online behaviors in other adolescent couples in their group of friends are variables that should also be considered. The peer group has a strong influence on adolescents' beliefs, attitudes, and behaviors (Mumford et al., 2020), and it should be considered to a greater degree. Another limitation of this study is that previous experience of adolescents in dating relationships has not been considered. Although adolescents have less experience in romantic relationships compared to young people and adults (Connolly et al., 2004; Viejo et al., 2021), there is also variability among them, and this variable should be included in future studies.

Moreover, it would be valuable to explore how adolescents' tolerant attitudes toward abuse and CDV victimization are related to other individual, family, and social risk factors, such as the time spent on social networking sites, online risk behaviors, family conflicts, and cyberbullying victimization (Caridade et al., 2019; Caridade & Braga, 2020). Future studies that include more variables and larger samples might allow us to delve into possible differences between the risk factors for cyber-control and cyber-aggression victimization and more broadly analyze gender differences in these risk factors. Larger samples that include a greater age range would also make it possible to analyze possible differences in the relationships between these variables based on adolescents' age. Furthermore, it is also necessary to carry out studies with samples from different countries and cultures to analyze to what extent the characteristics of the socio-cultural context can imply differences in CDV victimization, and how these characteristics can interact with gender.

Conclusions

CDV victimization has serious negative consequences for adolescents, and their constant use of ICTs in their romantic relationships favors this type of cybervictimization. In this regard, the present study provides knowledge about variables related to CDV victimization in adolescents, which can be useful in developing more effective prevention programs. More specifically, the results of this study support direct and indirect relationships between adolescents' beliefs in romantic myths of love and both cyber-control and cyber-aggression victimization. Regarding the indirect relationships between these variables, an interesting and novel result is the mediating role of adolescents' tolerant attitudes toward abuse in their dating relationships. These findings highlight the importance of paying more attention to tolerant attitudes toward abuse in CDV victimization prevention programs, making adolescents aware of these attitudes and how they are linked to both their beliefs in romantic myths and some online abusive behaviors. Given that first romantic relationships influence later relationships (Cornelius & Resseguie, 2007), it is important to implement these interventions during early adolescence.

In addition, results of this study also showed that gender is a moderator variable in the indirect relationships between romantic myths and CDV victimization. A stronger link between romantic myths and tolerant attitudes toward abuse, and between these attitudes and cyber-control victimization, was found in adolescent girls. Both gender and culture, as well as their possible interaction, need to be further considered in research on CDV victimization. At this regard, the present study provided interesting data related to the Spanish context, finding some significant gender differences. Future studies, in different countries and cultures, should delve into these aspects in order to design prevention strategies more adapted to the specific sociocultural context and in which possible gender differences are considered.

Conflict of Interest

The authors have no conflict of interests to declare.

Authors' Contribution

María-Jesús Cava: conceptualization, data curation, formal analysis, investigation, project administration, writing—original draft, writing—review & editing. **Isabel Castillo:** formal analysis, methodology, writing—original draft, writing—review & editing. **Inés Tomás:** formal analysis, methodology, writing—review & editing. **Sofía Buelga:** project administration, writing—review & editing.

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Appendix

Table A1. Range of Response and Items of the Measurement Instruments.

Instrument	Range of response	Items
Myths of Romantic Love Scale	Adolescents were asked to respond to these items using a five-point Likert scale ranging from 1 (<i>strongly disagree</i>) to 5 (<i>strongly agree</i>).	<ol style="list-style-type: none"> 1. Los celos son una prueba de amor [Jealousy is proof of love]. 2. Cuando mi pareja me controla, me demuestra su amor [When my partner controls me, he/she shows me his/her love]. 3. Si él/ella me quiere, me hará llorar [If he/she loves me, he/she will make me cry]. 4. Si le demuestro que le quiero, cambiará y me hará feliz [If I show him/her that I love him/her, he/she will change and make me happy]. 5. Separarse de la pareja es un fracaso [Separating from one's partner is a failure]. 6. Se puede tratar mal a la persona que amas [You can mistreat someone you love]. 7. Todos tenemos una única pareja ideal, nuestra 'media naranja' [We all have a single ideal partner, our 'soul mate'].
Attitudes of Tolerance toward Abuse in Romantic Relationships Scale	Adolescents answered these items by indicating the extent to which they could forgive their partner for these behaviors with four possible response options: 1 (<i>never</i>), 2 (<i>once</i>), 3 (<i>several times</i>), 4 (<i>many times</i>).	<ol style="list-style-type: none"> 1. Controlar tus Redes Sociales (p.e., Tuenti, Instagram) [Control your social networks (e.g., Tuenti, Instagram)] 2. No dejarte salir con tus amigos [Not let you go out with friends]. 3. Empujarte [Push you]. 4. Insultarte [Insult you]. 5. Mentirte [Lie to you]. 6. Ser celoso/a contigo [Be jealous of you]. 7. Decirte cómo vestir [Tell you what clothes to wear]. 8. Hacerte llorar [Make you cry]. 9. Golpearte [Hit you]. 10. Hablar mal de tus amigos/as [Make negative comments about your friends]. 11. Controlar tu WhatsApp [Control your WhatsApp].
Cyber-Violence Scale in Adolescent Couples: Cyber-victimization subscale	Adolescents indicated the frequency with which their partner had performed these behaviors using a four-point Likert scale: 1 (<i>never</i>), 2 (<i>seldom</i>), 3 (<i>sometimes</i>), and 4 (<i>often</i>).	<ol style="list-style-type: none"> 1. Mi pareja se enfada si ve que estoy en línea y no le contesto enseguida [My partner gets angry if he/she sees that I am online and I don't answer him/her right away]. 2. Mi pareja está pendiente de si estoy en línea en el móvil o conectado en Redes Sociales [My partner is aware of whether I am online on my mobile or connected to social networks].
Cyber-control (items 1–5)		<ol style="list-style-type: none"> 3. Mi pareja no me deja chatear con algunos amigos/as y se enfada si lo hago [My partner doesn't let me chat with some friends and gets angry if I do].
Cyber-aggression (items 6–10)		<ol style="list-style-type: none"> 4. Me ha hecho eliminar o bloquear amigos/as de mis Redes Sociales o de mi móvil para que no tenga contacto con ellos [He/she has made me delete or block friends from my social networks or from my mobile phone so that I have no contact with them]. 5. Mi pareja me ha hecho eliminar comentarios, fotos o vídeos míos en Redes Sociales porque le ponían celoso/a [My partner has made me delete comments, photos, or videos of me on social networks because they made him/her jealous]. 6. Ha contado rumores o mentiras sobre mí en Redes Sociales [He/she has told rumors or lies about me on social media].

7. Mi pareja me ha insultado o amenazado por privado [My partner has insulted or threatened me privately].

8. Me ha dicho que, si corto con él/ella, dirá o publicará en Redes Sociales cosas personales mías [He/she has told me that if I break up with him/her, he/she will say or post personal things about me on social media].

9. Mi pareja ha hecho comentarios públicos sobre mí en Internet o en grupos de WhatsApp que me han hecho sentir mal [My partner has made public comments about me on the Internet or in WhatsApp groups that have made me feel bad].

10. Mi pareja ha enviado o subido a Redes Sociales sin mi permiso fotos, vídeos o mensajes míos que yo no quería que la gente viese [My partner has sent or uploaded to social networks without my permission photos, videos, or messages of me that I did not want people to see].

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