



Review

# Mapping the Cyber Interpersonal Violence among Young Populations: A Scoping Review

Bárbara Machado <sup>1,\*</sup>, Sónia Caridade <sup>2</sup>, Isabel Araújo <sup>3</sup> and Paula Lobato Faria <sup>4</sup>

<sup>1</sup> NOVA National School of Public Health, NOVA University of Lisboa, 1600-560 Lisboa, Portugal

<sup>2</sup> Center for Research in Psychology, School of Psychology, University of Minho, 4710-057 Braga, Portugal; scaridade@psi.uminho.pt

<sup>3</sup> Nursing Department, Vale do Ave School of Health, North Polytechnic Institute of Health, Vila Nova de Famalicão, 4760-409 Gandra, Portugal; isabel.araujo@ipsn.cespu.pt

<sup>4</sup> Interdisciplinary Centre for Social Sciences (CICS), Comprehensive Health Research Centre (CHRC), National School of Public Health, NOVA University, 1099-085 Lisboa, Portugal; pa.lobfaria@ensp.unl.pt

\* Correspondence: barbara.saphira@hotmail.com

**Abstract:** The increase in digital practices and networking has introduced important changes to social interactions. The extensive use of technology among young people has allowed for cyber communication, which has numerous benefits but can also trigger violence in relationships. Interpersonal violence affecting young people is becoming more widely recognized as a public health issue. The aim of this scoping review is to map and systematize the published academic literature on Cyber Interpersonal Violence (CIV) amongst young people, following the methodological approach proposed by Arksey and O'Malley. Five databases were searched: PubMed, Scopus, CINAHL (EBSCOhost), Science Direct and Social Sciences Citation Index. Eighteen studies in English, Portuguese, Spanish and French, published from 2004 onwards, were included. Three main areas arose in the CIV: cyber dating abuse, cyberbullying and cyber-harassment. Investing in prevention is the key to preventing cyber violence.

**Keywords:** young populations; cyber violence; interpersonal violence; scoping review



**Citation:** Machado, Bárbara, Sónia Caridade, Isabel Araújo, and Paula Lobato Faria. 2022. Mapping the Cyber Interpersonal Violence among Young Populations: A Scoping Review. *Social Sciences* 11: 207. <https://doi.org/10.3390/socsci11050207>

Academic Editor: Nigel Parton

Received: 18 March 2022

Accepted: 3 May 2022

Published: 10 May 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Adolescents and young people are vanguards of the consumption of new technologies. Young people's accessibility to technological tools has exploded, causing the youth to lose many communication and social interaction skills (Reed et al. 2016). Digital practices increase the risk of being exposed to cyber interpersonal violence (CIV) once everyone has access to the digital conversation, everywhere, with everyone. The use of digital tools confers numerous benefits to the social processes of adolescents; nevertheless, digital practices increase young people's exposure to interpersonal invasiveness, making them more susceptible to experiencing cyber dating abuse (CDA), cyberstalking, cyberbullying and sexting (Caridade et al. 2019; Jun 2020). According to recent studies, these forms of violence have received several labels, such as *electronic abuse*, *online abuse*, *sexual abuse*, *online sexual abuse*, *cyber harassment* (Flach and Deslandes 2017). The current literature uses aggression, abuse and violence as commutable, although they are not the same (Geffner 2016). Hence, the term abuse indicates not a single behaviour but the victim's context, motive and outcomes. Nevertheless, the existing measures do not contemplate these characteristics and are more dedicated to evaluating a specific behaviour. Defining these forms of violence represents an ongoing challenge for investigators in understanding the phenomenon in future research.

According to the objectives of the present scoping review, we will use all the possible terms, such as abuse, aggression and violence, to bring together the most significant number of manuscripts possible. We will be analysing violent interpersonal behaviours which occur via technological devices, such as game consoles, cell phones, computers and the internet

([European Institute for Gender Equality 2020](#); [Smith et al. 2019](#)), amongst our target group, i.e., young students. When it occurs in younger communities, interpersonal violence victimisation always constitutes an adverse childhood experience with potentially harmful lifetime effects ([Kowalski et al. 2019](#)).

Online interactions have unique features that promote and encourage intimidating tactics, such as control and monitoring ([Stephenson et al. 2018](#)). Hence, aggression can occur at any moment, and physical proximity with the victim loses importance in the online context. Additionally, the aggressor does not see the victim's reaction, so it is tempting to diminish the consequences of their acts ([Muñoz-Fernández and Sánchez-Jiménez 2020](#)). Lastly, the aggressor may feel immune due to the anonymity that the online context provides, while the victim experiences more humiliation due to a growing potential audience ([Stonard 2020](#)).

In this work, we explore all the various aspects understood to be part of CIV. The World Health Organization (WHO) has stated that "interpersonal violence is the fourth leading cause of death in adolescents and young people globally", and one in eight young people report sexual abuse ([World Health Organization 2021](#)).

In most parts of the world, cyber violence is becoming a significant concern, affecting an increasing number of people, particularly women and young people ([Council of Europe 2020](#)). Furthermore, it has been stated that cyber violence is not an isolated phenomenon, often following the same patterns as offline violence ([European Institute for Gender Equality 2020](#)). The Council of Europe (CE) defines cyber violence as "(...) the use of computer systems to cause, facilitate, or threaten violence against individuals that results in, or is likely to result in, physical, sexual, psychological, or economic harm or suffering and may include the exploitation of the individual's circumstances, characteristics, or vulnerabilities" ([Council of Europe 2020](#)).

The current literature ([Buelga et al. 2020](#); [Caridade and Braga 2019](#); [Galende et al. 2020](#); [Gkiomisi et al. 2017](#)) focuses on CDA or cyberbullying features. These are particularly concerning issues among teenagers, either because they are at a vulnerable age or because empirical evidence reveals that 56% of teens in dating relationships have experienced CDA ([Cava et al. 2020](#)). On the other hand, prevalence rates vary in terms of patterns of victimization or perpetration. Regarding cyber control behaviours, 10.6% of teenagers admitted to committing direct cyber abuse against their partners. This rate increased to 82% when it came to direct cyber aggression against their partner ([Borrajo et al. 2015](#)). Prevalence of victimization rates follow the same patterns, depending on whether direct cyber aggression (14%) or cyber control (75%) was measured.

In the cyberbullying field, a study carried out by Jun [[Formatting Citation](#)] states that 34% of the adolescents were involved in cyberbullying as cyberbullies (6.3%), victims (14.6%), or both cyberbullies and victims (13.1%). Even if data on cyber violence varies, these are significant issues that require attention, particularly in adolescence.

This article outlines a scoping review on the emerging theme of CIV with considerable impact on the interpersonal functioning of young people. Hence, the primary aim of the scoping review is to map and systematize the published academic literature on the mentioned subject. The secondary objectives are three, as follows: (i) to develop a descriptive overview of the existing academic literature to reveal the most relevant research trends on CIV amongst young people; (ii) to systematically map and categorise the wide variety of instruments designed to identify and assess CIV, in general and amongst our target group; (iii) to identify research gaps, and, consequently, to develop recommendations.

## 2. Methods

### 2.1. Search Strategy for Identifying Relevant Studies

This review follows the search strategy recommended by the Joanna Briggs Institute Manual [[Formatting Citation](#)], which includes the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist ([Tricco et al. 2018](#)). The search strategy was conducted in the following databases: PubMed, Scopus,

CINAHL (EBSCOhost), Science Direct and Social Sciences Citation Index. The search was conducted between September and December 2020. No geographical restraint was applied.

A search strategy was designed to retrieve as many potentially eligible studies as possible: [(Youth) OR (Adolescen\*) OR (Adolescent) OR (Students) OR (Universities)] AND [(Abuse) OR (Violence) OR (aggression) OR (aggress\*)] AND [(Cyber) OR (Digital) OR (Digit\*)].

## 2.2. Inclusion and Exclusion Criteria

The inclusion criteria referred to (1) studies on cyber interpersonal violence using a quantitative or qualitative approach; (2) studies on the adolescent population, which mainly comprised of university students; (3) studies published as of 2004; and (4) studies published in English, Portuguese, Spanish, and French.

The exclusion criteria referred to (1) studies not including cyber interpersonal violence (such as cyberbullying, cyber dating abuse, cyber harassment); (2) studies on a primarily adult population (where the sample is not comprised of students); (3) articles that focused on face-to-face violence; (4) studies published before 2004; and (5) clinical trials with no results.

## 2.3. Data Collection

Titles and abstracts were read by two reviewers, including the Principal Investigator (PI) and a co-investigator, to decide if they met the eligibility criteria. After the database search, the selected studies were carried out on Mendeley software, used for database organisation and removal of the duplicated articles. All studies that met the defined criteria were analysed in full text. Any issues regarding a study's eligibility have been handled after a debate with a third reviewer. The studies considered for inclusion were categorized according to the primary features: authors, year publication, geographic location, sample characteristics (N, age, sex), CIV domain, objectives, and main findings.

## 3. Results

Figure 1 summarizes the PRISMA (Moher et al. 2009) literature procedure. The scoping review covered a total of 18 studies. Out of 457 identified studies, we retrieved 85 references after applying the duplication process.

### 3.1. Overview of Included Studies

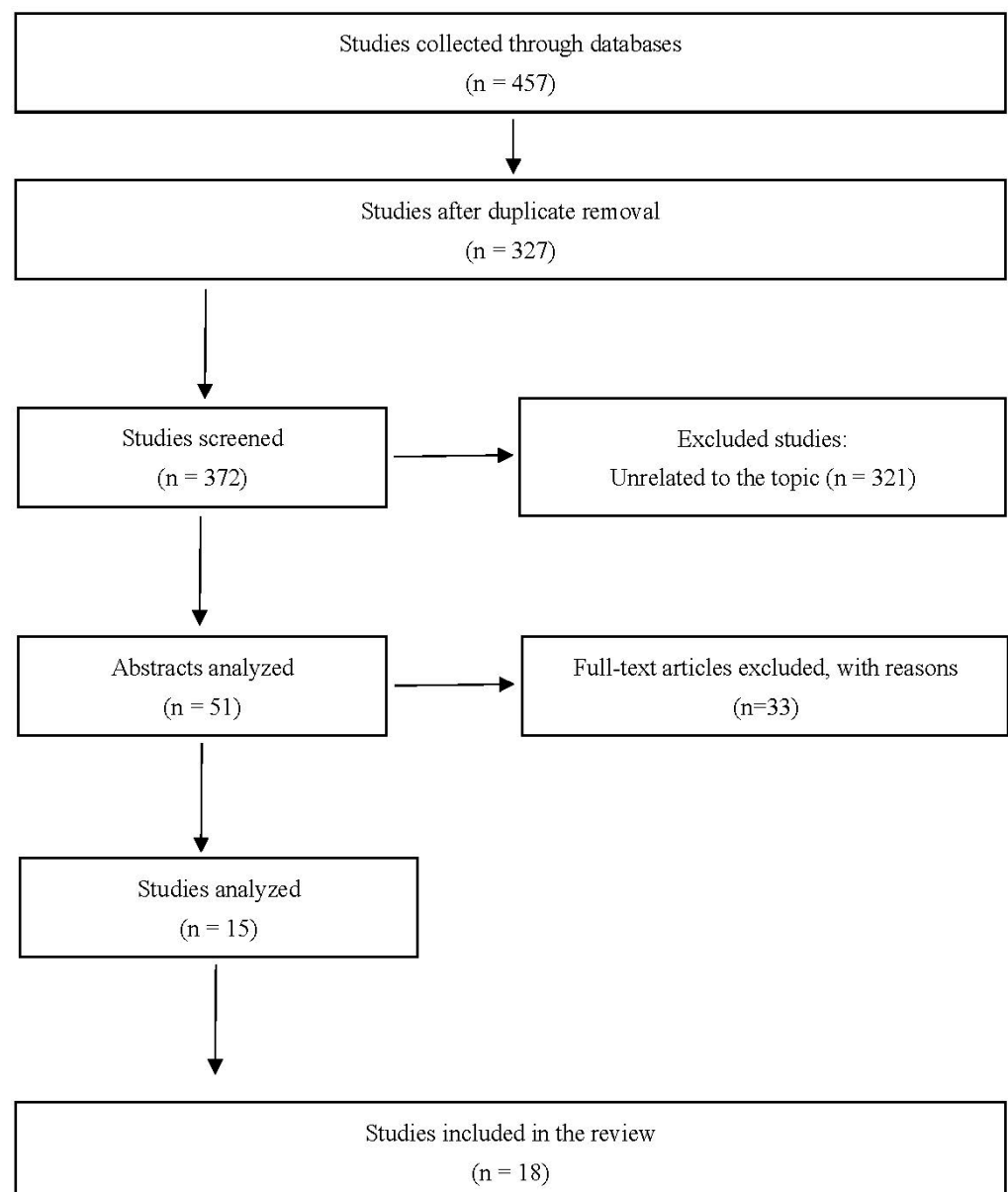
The eighteen articles included presented an overview of the existing research carried out about CIV, including the instruments produced and applied up until the present (Table 1).

### 3.2. Year of Publication and Location

The studies included in this study were published between the years of 2010 (Mishna et al. 2010) and 2020 (Buelga et al. 2020; Caridade et al. 2020; Galende et al. 2020; Jun 2020; Rebollo-Catalan and Mayor-Buzon 2020; Reed et al. 2016). The year with the most publications was 2020 (n = 6), followed by 2018 (n = 3) and 2019, and 2017 and 2015 (n = 2). Most of the studies were conducted in Spain (n = 4) (Buelga et al. 2020; Galende et al. 2020; Rebollo-Catalan and Mayor-Buzon 2020; Sánchez et al. 2015). Three studies were conducted in Portugal (Caridade et al. 2019, 2020; Pereira et al. 2016), and three included several countries (Athanasidou et al. 2018; Caridade et al. 2019; Del Rey et al. 2015). Two studies each were conducted in the United States of America (Peskin et al. 2017; Reed et al. 2020) and Canada (Mishna et al. 2010; Smith et al. 2018). Two studies were conducted in Asia: one in Korea (Jun 2020) and one in China (Lee et al. 2013). Approximately 67% of the studies were conducted in Europe (n = 12), mostly in Spain. One study was conducted in Italy (Morelli et al. 2018) and Greece (Gkiomisi et al. 2017).

### 3.3. Sample Characteristics

The sample size of the studies ranged from 61 (Lee et al. 2013) to 13,798 (Athanasiou et al. 2018). There were some disparities in the sample frame, including: students in general (n = 14) (Buelga et al. 2020; Caridade et al. 2019, 2020; Del Rey et al. 2015; Galende et al. 2020; Gkiomisi et al. 2017; Jun 2020; Pereira et al. 2016; Morelli et al. 2018; Peskin et al. 2017; Rebollo-Catalan and Mayor-Buzon 2020; Reed et al. 2016; Sánchez et al. 2015), university/college students (n = 1) (Caridade et al. 2019), and middle and high school students (n = 3) (Lee et al. 2013; Mishna et al. 2010; Smith et al. 2019). The age of the participants ranged from a minimum of 11 (Del Rey et al. 2015; Galende et al. 2020; Peskin et al. 2017) to a maximum of 30 (Caridade et al. 2019).



**Figure 1.** Flowchart of selection of studies. Note: PRISMA figure adapted from Moher, Liberati, Tetzlaff, Altman, The PRISMA Group (Moher et al. 2009); Creative Commons.

**Table 1.** Description of studies (n = 18) included in the scoping review protocol.

Author/s and Publication Year	Location	Sample Characteristics (N, Age)	Objectives	Main Results			Field	Type of Study
				Prevalence		Outcomes		
				Perp.	Vict.			
Galende et al. (2020)	Spain	Adolescents (aged 11 to 19 years)	<ul style="list-style-type: none"> <li>Prevention programs</li> </ul>	NA	NA	<ul style="list-style-type: none"> <li>Paucity of cyber dating violence prevention programs</li> <li>Interventions to the cognitive and/or attitudinal component behaviour</li> <li>Skill-building component (emotion regulation, communication skills, coping and conflict-resolution strategies)</li> </ul>	Cyber Dating Violence	Systematic review
Caridade et al. (2020)	Portugal, France and Spain	Students (aged 12 to 30 years)	<ul style="list-style-type: none"> <li>Prevalence rates</li> <li>Identify related variables</li> <li>Development and/or validation of measures</li> </ul>	8.1% to 93.7% (large variety in terms of gender differences)	5.8% to 92% (large variety in terms of gender differences)	<ul style="list-style-type: none"> <li>Developed a conceptual and methodological standardization</li> <li>The effectiveness of actions to prevent and respond to CDA was essential.</li> </ul>	Cyber Dating Violence	Systematic review
Peskin et al. (2017)	USA	Adolescents (aged 11 to 15 years) N = 424	<ul style="list-style-type: none"> <li>Prevalence rates</li> <li>Identify related variables</li> </ul>	15%	NA	<ul style="list-style-type: none"> <li>Forms of CDA: using dating partner's social networking account, intimidate partner for not responding to calls or messages</li> </ul>	Cyber Dating Abuse	Survey
Smith et al. (2018)	Canada	High school students (aged 14 to 18 years) N = 190	<ul style="list-style-type: none"> <li>Prevalence rates</li> <li>Explore self-esteem and physiological distress</li> </ul>	33%	35.6%	<ul style="list-style-type: none"> <li>Dating violence prevention programs should include issues related to CDV in schools</li> </ul>	Cyber Dating Violence	Survey
Caridade and Braga (2019)	Portugal	University students (average age of 28.41) N = 272	<ul style="list-style-type: none"> <li>Prevalence rates</li> <li>Development and/or validation of measures</li> </ul>	63.2% online control 66.9% any CDA	58.8% online control 59.2% any CDA	<ul style="list-style-type: none"> <li>With high reliability, CFA found four factors: direct aggression victimization (0.86), control victimization (0.91), direct aggression perpetrator (0.89), and control perpetrator (0.84)</li> </ul>	Cyber Dating Abuse	Cyber Dating Abuse Questionnaire
Pereira et al. (2016)	Portugal	Adolescents (aged 12 to 16 years) N = 627	<ul style="list-style-type: none"> <li>Prevalence rates</li> </ul>	66.1%	NA	<ul style="list-style-type: none"> <li>Most adolescent victims are also aggressors</li> <li>Need of qualitative research in the field</li> <li>Integrated psychoeducational and intervention programs</li> </ul>	Cyber-harassment victimization	Cyber-harassment scale

Table 1. Cont.

Author/s and Publication Year	Location	Sample Characteristics (N, Age)	Objectives	Main Results			Field	Type of Study
				Prevalence		Outcomes		
				Perp.	Vict.			
Sánchez et al. (2015)	Spain	Adolescents and young adults (aged 12 to 21 years) N = 626	<ul style="list-style-type: none"> <li>Development and/or validation of measures</li> </ul>	93.7% (males have more intrusive behaviours compared with females)	NA	<ul style="list-style-type: none"> <li>EFA and CFA highlighted six indicators as being highly reliable: Emotional Communication Strategies (0.84); Online Control (0.85); Online Jealousy (0.79); Online Intrusive Behavior (0.84); Online Intimacy (0.71); and Cyber Dating Practices (0.75)</li> </ul>	Cyber Dating	Mix approach: focus group and survey
Morelli et al. (2018)	Italy	Adolescents (aged 13 to 22 years) N = 1405	<ul style="list-style-type: none"> <li>Prevalence rates</li> <li>Development and/or validation of measures</li> </ul>	67% of digital psychological violence 13% of digital relational violence	64% of digital psychological violence 14.3% of digital relational violence	<ul style="list-style-type: none"> <li>Psychological and relational for both perp. (0.82, 0.81, respectively) and vict. (0.82, 0.81, respectively) were found as two factors with high reliability by EFA and CFA</li> </ul>	Cyber Dating Violence	Cyber Dating Violence Inventors
Jun (2020)	Korea	Adolescents N (2017) = 4500 N (2018) = 4662 N (2019) = 4779	<ul style="list-style-type: none"> <li>Prevalence rates</li> </ul>	54.1%	57.1%	<ul style="list-style-type: none"> <li>Verbal aggression and instant messaging are the two most common forms of cyberbullying.</li> <li>The lower the rate of cyberbullying exposure, the more engagement with parents.</li> <li>The smaller the rate of cyberbullying encounters, the more loyal friend relationships are.</li> <li>There is a need to provide instructional materials that can help to prevent cyberbullying.</li> </ul>	Cyberbullying	National Information Society Agency survey
Rebollo-Catalan and Mayor-Buzon (2020)	Spain	Adolescents (aged 13 to 17 years) N = 1468	<ul style="list-style-type: none"> <li>Behaviour and actions from the bystanders</li> </ul>	NA	NA	<ul style="list-style-type: none"> <li>More than a third of those who observed the violence took no action.</li> <li>Girls were more active than boys in their efforts to assist the victim.</li> <li>This behaviour was normalized and even justified by both girls and boys.</li> </ul>	Cyber Violence	Survey

Table 1. Cont.

Author/s and Publication Year	Location	Sample Characteristics (N, Age)	Objectives	Main Results			Field	Type of Study
				Prevalence		Outcomes		
				Perp.	Vict.			
Athanasίου et al. (2018)	Germany, Greece, Island, Netherland, Poland, Romania and Spain	Adolescents (aged 14 to 17 years) N = 13,708	<ul style="list-style-type: none"> <li>■ Prevalence rates</li> <li>■ Related variables</li> </ul>	NA	Higher rate 37.3% (Romania) and lowest in 13.3% (Spain)	<ul style="list-style-type: none"> <li>■ Cyberbullying victimization was associated with social network sites</li> <li>■ Integrating Internet communication technology teaching in educational contexts should be emphasized as a preventive approach.</li> <li>■ Internalizing and externalizing issues are linked to cyber victimization.</li> </ul>	Cyberbullying	Survey
Caridade et al. (2020)	Portugal	Adolescents and young adults (mean age of 25.36 years) N = 173	<ul style="list-style-type: none"> <li>■ Prevalence rates</li> <li>■ Abuse context</li> </ul>	43.4%	38.2%	<ul style="list-style-type: none"> <li>■ CDA is generally associated with jealousy.</li> </ul>	Cyber Dating Abuse	Survey
Mishna et al. (2010)	Canada	Middle and high school students (5th to 12th grade) N = 2186	<ul style="list-style-type: none"> <li>■ Prevalence rates</li> <li>■ Use of technology</li> </ul>	33.7%	49.5%	<ul style="list-style-type: none"> <li>■ Most bullying was perpetrated by and against friends</li> <li>■ Teens practice cyberbullying because it makes them feel funny, popular, and powerful</li> </ul>	Cyberbullying	Survey
Lee et al. (2013)	China	High school students N = 61	<ul style="list-style-type: none"> <li>■ Prevention program</li> </ul>	NA	NA	<ul style="list-style-type: none"> <li>■ The WebQuest course improved understanding about cyberbullying rapidly and effectively, lowered intentions, and maintained the benefits after learning.</li> <li>■ It didn't change attitudes toward cyberbullying</li> </ul>	Cyberbullying	Survey
Reed et al. (2020)	USA	Young populations	<ul style="list-style-type: none"> <li>■ Prevalence rates</li> </ul>	NA	Girls/female 2.5% to 25% Boys/male 0.8% to 24.4% Total 1% to 58.7%	<ul style="list-style-type: none"> <li>■ Types of CSH: sexual harassment experienced online, unwanted sexual solicitation, receiving unwanted sexual messages/photos, having sexual messages/images shared without permission.</li> </ul>	Cyber sexual harassment	Review
Buelga et al. (2020)	Spain	Adolescents (aged 12 to 16 years) N = 1318	<ul style="list-style-type: none"> <li>■ Prevalence rates</li> <li>■ Development and/or validation of measures</li> </ul>	NA	NA	<ul style="list-style-type: none"> <li>■ Item Factor Analyses identified two-factor structure: direct cyber-aggression and indirect cyber-aggression</li> </ul>	Cyberbullying	Adolescent Cyber-Aggressor scale

Table 1. Cont.

Author/s and Publication Year	Location	Sample Characteristics (N, Age)	Objectives	Main Results			Field	Type of Study
				Prevalence		Outcomes		
				Perp.	Vict.			
Gkiomisi et al. (2017)	Greece	Adolescents (aged 12 to 15 years) N = 666	■ Prevalence rates	NA	62%	<ul style="list-style-type: none"> <li>■ The majority of victims are neither physically nor psychologically harmed due to the cyber-attack</li> <li>■ Victims do not share the event with anyone</li> </ul>	Cyberbullying	Survey
Del Rey et al. (2015)	Spain, Germany, Italy, Poland, United Kingdom and Greece	Adolescents (aged 11 to 13 years) N = 5679	■ Development and/or validation of measures	NA	NA	<ul style="list-style-type: none"> <li>■ The Questionnaire for the European Cyberbullying Intervention Project has been structurally verified in a large segment of the population from six different countries. It may be used to assess psycho-educative interventions combating cyberbullying.</li> </ul>	Cyberbullying	Survey

NA—Not applied; Vict—Victimization; Perp—Perpetration; EFA—Exploratory factor analysis; CFA—Confirmatory Factor Analysis.



### 3.4. Field of the Studies

All 18 analysed studies self-report as regarding CIV. However, it was possible to understand some emerging fields: cyber dating violence/cyber dating abuse (n = 8) (Caridade and Braga 2019; Caridade et al. 2019, 2020; Galende et al. 2020; Morelli et al. 2018; Peskin et al. 2017; Sánchez et al. 2015; Smith et al. 2018), cyberbullying (n = 7) (Athanasidou et al. 2018; Buelga et al. 2020; Del Rey et al. 2015; Gkiomisi et al. 2017; Jun 2020; Lee et al. 2013; Mishna et al. 2010), cyber harassment (n = 2) (Pereira et al. 2016; Reed et al. 2020) and cyber bystanders (n = 1) (Rebollo-Catalan and Mayor-Buzon 2020).

### 3.5. Assessment Tools

CIV was assessed using various methods given their importance for the operationalization of CIV. As one of the critical objectives of the current investigation, we discuss them in Table 2.

**Table 2.** Tools used to assess CIV.

Field	Measures/Author(s)	Author(s)/Year Publication	Scale/Factors (Items)
CDA/CDV	Cyber Dating Abuse Questionnaire, developed from the cyberbullying scales of Litwiler and Brausch (2013)	Smith et al. (2018)	Victimization (8) Perpetration (8)
	13 items adapted from previous studies (Zweig et al. 2013).	Peskin et al. (2017) Van Ouytsel et al. (2017)	Perpetration (13)
	Cyber Dating Abuse Questionnaire (CDAQ) (Borrajó et al. 2015)	Borrajó et al. (2015) Borrajó and Gámez-Guadix (2016) Caridade and Braga (2019) Van Ouytsel et al. (2016, 2017) García-Sánchez et al. (2017)	Perpetration (20) Victimization (20) Direct aggression (10) Control/monitoring (10)
	Cyber Dating Q_A Scale	Sánchez et al. (2015) Sánchez Jiménez et al. (2017)	Perpetration emotional communication strategies (ECS) (7) Online control (OC) (6) Online jealousy (OJ) (4) Online intrusive behavior (OIB) (4) Online intimacy (OI) (3) Cyber dating practices (CP) (4)
	Cyber Dating Violence Inventory (CDVI) developed from the Conflict in Adolescent Dating Relationship Inventory (CADRI) (Morelli et al. 2018)	Morelli et al. (2018)	Victimization and perpetration psychological violence (12) Relational violence (10)
	Cyber Dating Abuse Victimization (CDAV) (Zweig et al. 2014)	Lu et al. (2018) Zweig et al. (2013, 2014)	Victimization (12)
Cyberbullying	Cyberbullying and Online Aggression (Hinduja and Patchin 2011) and 8 items about dating behaviors	Zerach (2016)	Victimization (9) Perpetration (9)
	Cyberbullying survey	Jun (2020)	Victimization
	Achenbach's Youth Self Report (YSR)	Athanasidou et al. (2018)	Victimization
	Several Questions about Experience of cyber bullying	Mishna et al. (2010)	Victimization Perpetration
	Self-Compiled Questionnaire	Lee et al. (2013).	Prevention
	CYB-AGS Cyber-Aggressor Scale	Buelga et al. (2020)	Victimisation
	European Cyberbullying Intervention Project Questionnaire	Del Rey et al. (2015)	Victimization (11) Aggression (11)

Table 2. Cont.

Field	Measures/Author(s)	Author(s)/Year Publication	Scale/Factors (Items)
Cyber-harassment	Cyber-Harassment Assessment Scale	Pereira et al. (2016) Spitzberg and Hoobler (2002)	Victimization Perpetration (18)
	General items about sexual harassment experienced online	Korchmaros et al. (2013) Pew Research Center (2014)	
	Unwanted sexual solicitation	Marret and Choo (2017) Chang et al. (2016) Jones et al. (2013)	
	Unwanted sexual messages/photos	Sánchez Jiménez et al. (2017) Pew Research Center (2014) Choi et al. (2016) Montiel et al. (2016)	
	Sexual messages/images shared without permission	(Kearl 2018) Pew Research Center (2014) Powell and Henry (2018)	

In the field of CDA/CDV, the measurement tools that emerged were the Cyber Dating Abuse Questionnaire (CDAQ) developed by Borrajo et al. (2015) (n = 8), the Cyber Dating Violence Inventory (CDVI) (n = 1) (Morelli et al. 2018), the Cyber Dating Q\_A Scale (n = 2) and Cyber Dating Abuse Victimization (CDAV) (n = 3). Many of the tools assess both victimization and perpetration, while a smaller number of instruments focus only on victimization (n = 1) or perpetration (n = 1).

In the field of cyberbullying, the measurement tools that emerged were Cyberbullying and Online Aggression (n = 1), a cyberbullying survey (n = 1), Achenbach's Youth Self Report (n = 1), self-complied questionnaire (n = 1), one study including several questions about the experience of cyber bullying (Gkiomisi et al. 2017), the CYB-AGS cyber-aggressor scale (n = 1) and one study including the European Cyberbullying Intervention Project Questionnaire, which included European countries such as Spain, Germany, Italy, Poland, United Kingdom and Greece (Del Rey et al. 2015).

Cyber-harassment measures included the Cyber-harassment Assessment Scale (n = 2) while one study analysed general items about sexual harassment experienced online (n = 1) (Reed et al. 2020).

### 3.6. Objectives and Main Findings

Many studies (n = 13) estimated prevalence rates. The number of participants who considered conducting CIV ranged from 8.1% (Caridade et al. 2019) to 93.7% (Sánchez et al. 2015). CDV was the field with the highest rates of perpetration (93.7%), followed by cyberbullying (54.1%).

The prevalence of victimization also differed significantly between research, ranging from 1% (Sánchez et al. 2015) in a study where the authors analysed cyber sexual harassment in young populations in the USA, to 92% (Caridade et al. 2019), also found in the USA study. In terms of different fields, CDV was the field with the highest victimisation rates (92%), followed by cyberbullying.

A European study also found that Romania has registered the highest rate, with 37.3%, in terms of cyberbullying victimisation, and Spain the lowest with 13.3%. In Italy, a study on CDV also found similar rates of perpetration and victimisation in digital psychological violence (67% vs. 64%) and digital relational violence (13% vs. 14.3%).

In the CDV field, the primary outcomes are: the necessity of a conceptual and methodological standardization (Caridade et al. 2019); that dating prevention programs should be included in schools (Smith et al. 2019); the necessity of a qualitative approach; and integration of psycho-educational and intervention programs (Pereira et al. 2016). In the cyberbullying field, the primary outcomes are: cyberbullying can assume several forms; the higher the interaction with parents, the lower the cyberbullying experience rate; it is necessary to develop teaching materials in order to prevent cyberbullying in the academic

field (Jun 2020); cyberbullying victimization is associated with social network sites; integrating internet communication technology instruction in educational contexts should be emphasized as a preventive approach (Athanasidou et al. 2018); most cyberbullying is perpetrated by and against friends; and teens practice cyberbullying because it makes them feel funny, famous and influential (Mishna et al. 2010).

### 3.7. Measures to Assess CIV

One of the main goals of several of the studies examined ( $n = 6$ ) was developing and validating measures.

A study conducted in Portugal validated the Cyber Dating Abuse Questionnaire (CDAQ) with good reliability (Caridade and Braga 2019). Morelli et al. (2018) validated the cyber dating violence inventory with good reliability in Italy. Overall, all the studies obtained adequate measures through Cronbach's alpha, ranging from 0.71 (Sánchez et al. 2015) to 0.91 (Caridade et al. 2019). In the cyberbullying field in Spain, Buelga et al. (2020) analysed the psychometric properties of the CYB-AGS cyber-aggressor scale.

## 4. Discussion

We successfully found 18 studies in the present scoping review. Our results reveal that the interest of the scientific community in the study of cyber violence has increased considerably in the last five years. Other structured literature reviews also found recent interest (Caridade et al. 2019; Flach and Deslandes 2017). This result is something to be expected considering the technological revolution that we have witnessed in recent decades, with teenagers being the primary users of digital tools in their daily lives (Guadix et al. 2018). The current interest in CIV emphasizes the need to find an international construct regarding a problem that affects boys and girls in their interpersonal relationships. Our results corroborated this perspective once we obtained a high variability in the existing instruments regarding dimensions, definitions, methodology, and approach to the cyber violence problem. Contemporary research on CIV has produced highly variable and complex results to interpret, with a considerable amount of content (Caridade et al. 2019; Flach and Deslandes 2017; Guadix et al. 2018; Brown and Hegarty 2018). On the other side, prevalence rates are also variable, with victimization rates ranging from 1% to 92% and perpetration rates between 8.1% (Caridade et al. 2019) to 93.7% (Sánchez et al. 2015).

This variability can be understood by considering the inherent features of the online space where cyber violence occurs, which finds itself undergoing continuous development. The digital world represents an endless opportunity, with vanguardist solutions, both in terms of internet access, progress, and technological advances, including more sophisticated computers, smartphones and other devices. These advances offer the youth new tools but also represent new opportunities for aggression and victimization (Lucero et al. 2014). This progress and development can justify the variability in results, such as the methodology, instruments concept, and the difficulties in developing a solid construct in the cyber violence field.

Different constructs have been used to describe cyber violence, such as cyber sexual harassment, cyber-harassment victimization, cyber dating abuse, cyber dating violence, cyberbullying, cyber violence, electronic aggression and online teen dating violence. Our scoping review found that three fields emerged: CDA/CDV, cyberbullying and cyber-harassment.

Cyber violence areas revealed similar levels of victimization to those detected in in-person violence (Caridade et al. 2019). For that reason, it has been questioned whether cyber violence constitutes a new form of violence or an extension of face-to-face violence (Muñoz-Fernández and Sánchez-Jiménez 2020; Stephenson et al. 2018). In the CDA field, some authors assume the first option and revise their measures to the online context (Morelli et al. 2018); others believe in the second option since cyber violence has unique characteristics that are distinct from face-to-face violence (Peskin et al. 2017). In terms of the cyberbullying context, most authors consider that regardless of the similarities with

bullying, cyberbullying has its specific attributes and manners of aggression in the online world (Buelga et al. 2020; Jun 2020). For example, in cyberbullying, cyberspace allows anonymity to the aggressor and, although there is no physical aggression, the audience is much vaster so that the suffering may be more prominent for victims. Lastly, some authors (e.g., Sánchez et al. 2015) consider cyber harassment an extension of face-to-face violence, while others (e.g., Pereira et al. 2016) agree that it has specificities that can only be observed online. For example, young people today face a troubling reality when they come across sexual content shared without permission, which causes harm to young people. In the virtual world, everything is public, so anyone can see and share it, making it practically impossible to completely remove this content. Therefore, CIV can be understood as several abusive typologies (e.g., psychological, physical, sexual, control and direct aggression), such as those found in face-to-face dating violence (Caridade et al. 2019; European Commission 2021; European Institute for Gender Equality 2020).

Different tools were used to measure CDA/CDV, cyberbullying and cyber-harassment. In the CDA/CDV field, six different tools were used. In the cyberbullying field, seven tools were used, and in cyber-harassment, five tools emerged. All the tools were developed and validated for the different proposals, and all used different criteria (e.g., victimization, perpetration or both; specific versus broad behaviours).

Furthermore, five of the studies tried to design and verify measures using exploratory and confirmatory factor analyses to confirm various conceptually different factors. We also found significant differences in other methodological aspects of the studies, namely, the sample size and sampling context and the time assessed (e.g., from the last week to life), which explains the varying prevalence rates. This lack of consensus in terms of conceptions, methods, and methodological aspects can result in a wide range of prevalence estimates, meaning CIV knowledge is currently limited. As a result, there is a higher need for scientific investigation and explanation of CIV (Borrajo et al. 2015; Buelga et al. 2020; Del Rey et al. 2015; Reed et al. 2016; Sánchez et al. 2015).

The evidence demonstrates the importance of focusing on the development of prevention and intervention policies for these different forms of CIV.

CIV is a real problem for our society, with high rates of perpetration and victimization, 63.2% and 58.8%, respectively, in this instance in Portugal (Caridade and Braga 2019). Cyber-harassment perpetration is also very common among adolescents, with perpetration rates of 66.1% (Pereira et al. 2016). Digital psychological violence is also a problem, with levels of perpetration of 67% and victimization of 64%. This could be explained by the fact that some of the authors that have discussed these adolescents often do not recognize the numerous forms of digital emotional abuse and cyber control as violence (Lucero et al. 2014), something that should be further understood and studied, as it will condition responses to the violence process. Some authors are also alert that this fact could lead adolescents, who may be unaware of this, to admit online control behaviours more readily than direct aggression (Caridade et al. 2019).

This scoping review also broadened our understanding of CIV perpetration and victimization-related characteristics. The perpetuation of CIV has been linked to a wide range of factors. Individual factors (demographic, psychosocial, behavioural and psychological) accounted for most of the variables, while others included relationships (peer and family) and community influences (Buelga et al. 2020; Guadix et al. 2018; Peskin et al. 2017). The studies evaluating gender as a specific demographic factor produced mixed results. Some studies (Jun 2020; Pereira et al. 2016; Smith et al. 2018) supported gender differences in CIV perpetration and others (Borrajo et al. 2015; Jun 2020; Smith et al. 2018) showed similar rates of CIV-perpetrating behaviours among males and females. These mixed-gender findings corroborate what has been verified in dating violence in person (Cava et al. 2020) and reveal the need to deepen research in this domain, given the growing gender equity in access to the digital world. More individual factors were assessed, including psychosocial factors such as jealousy and sexist beliefs. In addition, behavioural factors, including bullying perpetration, conduct disorders and drug use, were analysed.

Psychological factors were also included, such as narcissism, with findings revealing that they were linked to CIV perpetration (Caridade and Braga 2019; Jun 2020; Peskin et al. 2017). In CIV, these characteristics can become more harmful because, with digital dissemination, it is easier to have followers that share the same beliefs, potentially causing the aggression to be magnified (Lucero et al. 2014).

Many characteristics associated with CIV victimization have been identified, such as depressive symptoms, anxiety, emotional/psychological distress, delinquency, prior cyber victimization, bad grades in school and parental closeness, among others (Buelga et al. 2020; Forbes et al. 2019; Peskin et al. 2017).

Protective factors are explored in this context. Given the importance of correlations in designing intervention and preventative measures, further study in this area is needed (Kowalski et al. 2019; Peskin et al. 2017).

To summarise, it is a vital requirement for additional research to characterise the dimensions that comprise cyber dating violence and other types of CIV, such as cyberbullying and cyber harassment. The studies in the field should pursue a path of standardisation to develop and produce robust and valid instruments that allow us to recognise and compare the prevalence data. This will make it possible to obtain a more inclusive understanding of the phenomenon and encourage possible prevention and intervention programs in schools and universities (Backe et al. 2018). This study is particularly crucial for the adolescent population, which appears to be a highly susceptible group to the impacts of being involved in cyber violence.

Our study has some weaknesses. First, violence through new technologies is an emergent phenomenon that lacks conceptual standardization. Furthermore, due to the variability of terminology available, some manuscripts may not have been selected. The following limitation is closely connected to the analysis of this phenomenon. Due to new violent behaviours, sometimes and in some cases and realities, it is challenging to discover their nature and underlying intentions. For example, impersonation of peers on social media can be recognised as controlling behaviour when it is performed to acquire information about a friend or relation if the intention is to disrupt the partner's peer relationships. To enable awareness, upcoming measures should accurately describe the measured behaviours. Finally, for a deeper understanding of cyber violence, studies with a longitudinal methodology are necessary. This methodology will allow more precise temporal inferences and more explicit identification of distinct variables such as lifestyle factors or the effects of various types of cyber violence. Longitudinal approaches should prove to be useful in deepening the variables related to CIV. Future studies should also focus on the influence of CIV on adolescents' lives and whether the impact of CIV varies depending upon the nature of the communications tools used. Such practices are essential to better education and focusing future policy and intervention actions.

## 5. Conclusions

This scoping review has attempted to gather knowledge of the existing academic literature to reveal the most relevant research trends in cyber violence among youth. In addition, it summarises the available instruments used to measure adolescent cyber violence, such as CDA/CDV, cyberbullying and cyber-harassment. According to our results, CIV can be thought of as a multidimensional construct with sexual and nonsexual behaviours, grouped into different dimensions and among several fields, as stated above. This analysis provides an awareness of cyber violence as an extension of the many forms of face-to-face violence, granting the expression and refinement of new behaviours such as control/monitoring, cyber sexual violence, or public aggression.

Lastly, the current literature uses aggression, abuse and violence as commutable. Authors must define these terms in their theoretical framework; a conceptual and methodological uniformity is required to achieve higher generalizability of the findings in this research field and to prevent and intervene successfully. It is also essential to define how we measure aggression, abuse, or violence among young people. For example, insulting a peer

once via technology can be understood as aggression but not considered as abuse. Hence, it would require numerous instances in order to be considered abuse, as with face-to-face abuse. However, nowadays, young people use public broadcasts or videos with sexual content as a form of revenge. In this case, aggression might be considered abuse because there is a clear intention to hurt the victim and the consequences are severe. Future research should analyse if public exposure modulates the perception of aggression or abuse and evaluate the efficiency of prevention and intervention educational programmes, which we believe is the next step for research in this area.

**Author Contributions:** Conceptualization, B.M. and S.C.; methodology, B.M.; software, B.M.; validation, I.A., P.L.F. and S.C.; formal analysis, B.M.; investigation, B.M.; resources, B.M.; data curation, B.M.; writing—original draft preparation, B.M.; writing—review and editing, S.C.; visualization, I.A.; supervision, P.L.F.; project administration, B.M.; funding acquisition, S.C. All authors have read and agreed to the published version of the manuscript.

**Funding:** This study was conducted at the Psychology Research Centre (PSI/01662), School of Psychology, University of Minho, supported by the Foundation for Science and Technology (FCT) through the Portuguese State Budget (Ref.: UIDB/PSI/01662/2020).

**Data Availability Statement:** The database will be made available upon request to barbara.saphira@hotmail.com.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Athanasiou, Kalliope, Eirini Melegkovits, Elisabeth K. Andrie, Charalampos Magoulas, Chara K. Tzavara, Clive Richardson, Donald Greydanus, Maria Tsofia, and Artemis K. Tsitsika. 2018. Cross-national aspects of cyberbullying victimization among 14–17-year-old adolescents across seven European countries. *BMC Public Health* 18: 800. [CrossRef] [PubMed]
- Backe, Emma Louise, Pamela Lilleston, and Jennifer McCleary-Sills. 2018. Networked individuals, gendered violence: A literature review of cyberviolence. *Violence and Gender* 5: 135–46. [CrossRef]
- Borrajo, Erika, and Manuel Gámez-Guadix. 2016. Abuso “online” en el noviazgo: Relación con depresión, ansiedad y ajuste diádico. *Behavioral Psychology/Psicología Conductual* 24: 221–35.
- Borrajo, Erika, Manuel Gámez-Guadix, Noemí Pereda, and Esther Calvete. 2015. The development and validation of the cyber dating abuse questionnaire among young couples. *Computers in Human Behavior* 48: 358–65. [CrossRef]
- Brown, Cynthia, and Kelsey Hegarty. 2018. Digital dating abuse measures: A critical review. *Aggress Violent Behavior* 40: 44–59. [CrossRef]
- Buelga, Sofia, Javier Postigo, Belén Martínez-Ferrer, María-Jesús Cava, and Jessica Ortega-Barón. 2020. Cyberbullying among adolescents: Psychometric properties of the CYB-AGS cyber-aggressor Scale. *International Journal of Environmental Research and Public Health* 17: 3090. [CrossRef]
- Caridade, Sónia, and Teresa Braga. 2019. Versão portuguesa do Cyber Dating Abuse Questionnaire (CDAQ)—Questionário sobre Ciberabuso no Namoro (CibAN): Adaptação e propriedades psicométricas. *Análise Psicológica* 1: 93–105. [CrossRef]
- Caridade, Sónia, Teresa Braga, and Erika Borrajo. 2019. Cyber dating abuse (CDA): Evidence from a systematic review. *Aggression and Violent Behavior* 48: 152–68. [CrossRef]
- Caridade, Sónia, 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]
- Cava, María-Jesús, Sofía Buelga, Laura Carrascosa, and Jessica Ortega-Barón. 2020. Relations among romantic myths, offline dating violence victimization and cyber dating violence victimization in adolescents. *International Journal of Environmental Research and Public Health* 17: 1551. [CrossRef]
- Chang, Fong-Ching, Chiung-Hui Chiu, Nae-Fang Miao, Ping-Hung Chen, Ching-Mei Lee, and Jeng-Tung Chiang. 2016. Predictors of Unwanted Exposure to Online Pornography and Online Sexual Solicitation of Youth. *Journal of Health Psychology* 21: 1107–18. [CrossRef] [PubMed]
- Choi, HyeJeong, Joris Van Ouytsel, and Jeff R. Temple. 2016. Association between Sexting and Sexual Coercion among Female Adolescents. *Journal of Adolescence* 53: 164–68. [CrossRef] [PubMed]
- Council of Europe. 2020. Cyberviolence. Available online: <https://www.coe.int/en/web/cybercrime/cyberviolence> (accessed on 22 December 2020).
- Del Rey, Rosario, José A. Casas, Rosario Ortega-Ruiz, Anja Schultze-Krumbholz, Herbert Scheithauer, Peter Smith, Fran Thompson, Vassilis Barkoukis, Haralambos Tsorbatzoudis, Antonella Brighi, and et al. 2015. Structural validation and cross-cultural robustness of the European Cyberbullying Intervention Project Questionnaire. *Computers in Human Behavior* 50: 141–47. [CrossRef]

- European Commission. 2021. A Cybersecure Digital Transformation in a Complex Threat Environment—Brochure. Available online: <https://ec.europa.eu/digital-single-market/en/news/cybersecure-digital-transformation-complex-threat-environment-brochure> (accessed on 21 November 2020).
- European Institute for Gender Equality. 2020. Violence at a Glance. Available online: <https://eige.europa.eu/gender-equality-index/2020/domain/violence> (accessed on 22 January 2021).
- Flach, Roberta Matassoli Duran, and Suely Ferreira Deslandes. 2017. Cyber dating abuse in affective and sexual relationships: A literature review. *Cadernos de Saude Publica* 33: 1–19. [CrossRef]
- Forbes, Miriam K., Sally Fitzpatrick, Natasha R. Magson, and Ronald M. Rapee. 2019. Depression, anxiety, and peer victimization: Bidirectional relationships and associated outcomes transitioning from childhood to adolescence. *Journal of Youth and Adolescence* 48: 692–702. [CrossRef] [PubMed]
- Galende, Nuria, Naiara Ozamiz-Etxebarria, Joana Jaureguizar, and Iratxe Redondo. 2020. Cyber dating violence prevention programs in universal populations: A systematic review. *Psychology Research and Behavior Management* 13: 1089. [CrossRef] [PubMed]
- 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. *Revista INFAD de Psicología. International Journal of Developmental and Educational Psychology* 2: 541–50. [CrossRef]
- Geffner, Robert. 2016. Partner aggression versus partner abuse terminology: Moving the field forward and resolving controversies. *Journal of Family Violence* 31: 923–25. [CrossRef]
- Gkiomisi, Athanasia, Maria Gkrizioti, Athina Gkiomisi, Dimitrios A. Anastasilakis, and Panagiotis Kardaras. 2017. Cyberbullying among Greek high school adolescents. *The Indian Journal of Pediatrics* 84: 364–68. [CrossRef]
- Guadix, Manuel Gámez, Erika Borrajo, and Esther Calvete Zumalde. 2018. Abuso, control y violencia en la pareja a través de internet y los smartphones: Características, evaluación y prevención. *Papeles del Psicólogo* 39: 218–27.
- Hinduja, Sameer, and Justin W. Patchin. 2011. *Electronic Dating Violence*. Thousand Oaks: Cyberbullying Research Center.
- Jones, Lisa, Kimberly Mitchell, and David Finkelhor. 2013. Online Harassment in Context: Trends from Three Youth Internet Safety Surveys (2000, 2005, 2010). *Psychology of Violence* 3: 53. [CrossRef]
- Jun, Wochun. 2020. A study on the cause analysis of cyberbullying in Korean adolescents. *International Journal of Environmental Research and Public Health* 17: 4648. [CrossRef] [PubMed]
- Kearl, Holly. 2018. *The Facts behind The# MeToo Movement: A National Study on Sexual Harassment and Assault*. Washington, DC: Stop Street Harassment.
- Korchmaros, Josephine D., Michele L. Ybarra, Jennifer Langhinrichsen-Rohling, Danah Boyd, and Amanda Lenhart. 2013. Perpetration of Teen Dating Violence in a Networked Society. *Cyberpsychology, Behavior, and Social Networking* 16: 561–67. [CrossRef] [PubMed]
- Kowalski, Robin M., Susan P. Limber, and Annie McCord. 2019. A developmental approach to cyberbullying: Prevalence and protective factors. *Aggression and Violent Behavior* 45: 20–32. [CrossRef]
- Lee, Ming-Shinn, Wu Zi-Pei, Leif Svanström, Koustuv Dalal, and Susan Tortolero Emery. 2013. Cyber bullying prevention: Intervention in Taiwan. *PLoS ONE* 8: e64031. [CrossRef]
- Litwiller, Brett J., and Amy M. Brausch. 2013. Cyber Bullying and Physical Bullying in Adolescent Suicide: The Role of Violent Behavior and Substance Use. *Journal of Youth and Adolescence* 42: 675–84. [CrossRef]
- Lu, Yua Joris Van Ouytselb, Michel Walraveb, Koen Ponnetc, and Jeff R. Templea. 2018. Cross-Sectional and Temporal Associations between Cyber Dating Abuse Victimization and Mental Health and Substance Use Outcomes. *Journal of Adolescence* 65: 1–5. [CrossRef]
- Lucero, Jessica L., Arlene N. Weisz, Joanne Smith-Darden, and Steven M. Lucero. 2014. Exploring gender differences: Socially interactive technology use/abuse among dating teens. *Affilia* 29: 478–91. [CrossRef]
- Marret, Mary J., and Wan Yuen Choo. 2017. Factors Associated with Online Victimization among Malaysian Adolescents Who Use Social Networking Sites: A Cross-Sectional Study. *BMJ Open* 7: e014959. [CrossRef]
- Mishna, Faye, Charlene Cook, Tahany Gadalla, Joanne Daciuk, and Steven Solomon. 2010. Cyber bullying behaviors among middle and high school students. *American Journal of Orthopsychiatry* 80: 362–74. [CrossRef]
- Moher, David, Alessandro Liberati, Jennifer Tetzlaff, Douglas G. Altman, and for the PRISMA Group. 2009. Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *BMJ* 339: b2535. [CrossRef] [PubMed]
- Montiel, Irene, Enrique Carbonell, and Noemí Pereda. 2016. Multiple Online Victimization of Spanish Adolescents: Results from a Community Sample. *Child Abuse & Neglect* 52: 123–34.
- Morelli, Mara, Dora Bianchi, Antonio Chirumbolo, and Roberto Baiocco. 2018. The cyber dating violence inventory. Validation of a new scale for online perpetration and victimization among dating partners. *European Journal of Developmental Psychology* 15: 464–71. [CrossRef]
- Muñoz-Fernández, Noelia, and Virginia Sánchez-Jiménez. 2020. Cyber-aggression and psychological aggression in adolescent couples: A short-term longitudinal study on prevalence and common and differential predictors. *Computers in Human Behavior* 104: 106191. [CrossRef]
- Pereira, Filipa, Brian H. Spitzberg, and Marlene Matos. 2016. Cyber-harassment victimization in Portugal: Prevalence, fear and help-seeking among adolescents. *Computers in Human Behavior* 62: 136–46. [CrossRef]

- Peskin, Melissa F., Christine M. Markham, Ross Shegog, Jeff R. Temple, Elizabeth R. Baumler, Robert C. Addy, Belinda Hernandez, Paula Cuccaro, Efrat K. Gabay, Melanie Thiel, and et al. 2017. Prevalence and correlates of the perpetration of cyber dating abuse among early adolescents. *Journal of Youth and Adolescence* 46: 358–75. [CrossRef]
- Pew Research Center. 2014. *Internet User Demographics*. Washington, DC: Pew Research.
- Powell, Anastasia, and Nicola Henry. 2018. Policing Technology-Facilitated Sexual Violence against Adult Victims: Police and Service Sector Perspectives. *Policing and Society* 28: 291–307. [CrossRef]
- Rebollo-Catalan, Angeles, and Virginia Mayor-Buzon. 2020. Adolescent bystanders witnessing cyber violence against women and girls: What they observe and how they respond. *Violence against Women* 26: 2024–40. [CrossRef]
- Reed, Elizabeth, Alice Wong, and Anita Raj. 2020. Cyber sexual harassment: A summary of current measures and implications for future research. *Violence against Women* 26: 1727–40. [CrossRef]
- Reed, Lauren A., Richard M. Tolman, and 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]
- Sánchez, Virginia, Noelia Muñoz-Fernández, and Rosario Ortega-Ruiz. 2015. "Cyberdating Q\_A": An instrument to assess the quality of adolescent dating relationships in social networks. *Computers in Human Behavior* 48: 78–86. [CrossRef]
- Sánchez Jiménez, Virginia, Noelia Muñoz Fernández, Luis Antonio Lucio López, and Rosario Ortega Ruiz. 2017. Ciberagresión En Parejas Adolescentes: Un Estudio Transcultural España-México. *Revista Mexicana de Psicología* 34: 46–54.
- Smith, Kevin, Jude Mary Cénat, Andréanne Lapierre, Jacinthe Dion, Martine Hébert, and Karine Côté. 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] [PubMed]
- Smith, Peter K., Leticia López-Castro, Susanne Robinson, and Anke Görzig. 2019. Consistency of gender differences in bullying in cross-cultural surveys. *Aggression and Violent Behavior* 45: 33–40. [CrossRef]
- Spitzberg, Brian H., and Gregory Hoobler. 2002. Cyberstalking and the Technologies of Interpersonal Terrorism. *New Media & Society* 4: 71–92.
- Stephenson, Victoria L., Brittany M. Wickham, and Nicole M. Capezza. 2018. Psychological abuse in the context of social media. *Violence and Gender* 5: 129–34. [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]
- Tricco, Andrea C., Erin Lillie, Wasifa Zarin, Kelly K. O'Brien, Heather Colquhoun, Danielle Levac, David Moher, Micah D. J. Peters, Tanya Horsley, Laura Weeks, and et al. 2018. PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine* 169: 467–73. [CrossRef]
- World Health Organization. 2021. Adolescent and Young ADULT Health. Available online: <https://www.who.int/news-room/fact-sheets/detail/adolescents-health-risks-and-solutions> (accessed on 19 January 2022).
- Van Ouytsel, Joris, Elizabeth Torres, Hye Jeong Choi, Koen Ponnet, Michel Walrave, and Jeff R. Temple. 2017. 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]
- Van Ouytsel, Joris, Koen Ponnet, Michel Walrave, and J. R. Temple. 2016. Adolescent Cyber Dating Abuse Victimization and Its Associations with Substance Use, and Sexual Behaviors. *Public Health* 135: 147–51. [CrossRef]
- Zerach, Gadi. 2016. Pathological Narcissism, Cyberbullying Victimization and Offending among Homosexual and Heterosexual Participants in Online Dating Websites. *Computers in Human Behavior* 57: 292–99. [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]