



Online Sexual Harassment in Adolescence: A Scoping Review

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Abstract

Introduction Sexual harassment is a complex behavior to study since it is characterized by various dimensions and definitions. Analyzing the characteristics and manifestations of this behavior in the online context, at such a vulnerable time as adolescence, is important to fully understand its nature, characteristics, and consequences.

Aims and Method This work aims to systematize the information available in the literature, identify labels used to refer to online sexual harassment in the adolescent population, describe the definition of online sexual harassment taking into consideration specific criteria that emerge from the studies, and describe the operationalization of online sexual harassment. The literature search was conducted in November 2021 through four scientific databases: Scopus, PubMed, PsycInfo, and Web of Science. The initial search led to 20958 results: after eliminating duplicates, screening, and reading of full-texts, 65 papers were included in the review.

Results The type of relationship between aggressor and victim, the use of abusive connotations, and the time frame of occurring behaviors are investigated in included studies. Moreover, different typologies of abuse have been described, by differentiating between studies that focus on the victim's point of view and studies that focus on the perpetrator's point of view.

Conclusion Online sexual harassment covers a wide range of behaviors using digital content (images, videos, posts, messages). Through this scoping review, it is possible to identify some key characteristics of this phenomenon: online sexual harassment has an abusive connotation, as it is perceived as unwanted by the victim, it can occur in three main typologies (verbal, visual, cybersex) and even a single episode is enough to experience victimization. In terms of relational behaviors, online sexual harassment includes unwanted sexual solicitations and non-consensual sharing.

Keywords Online · Cyber · Sexual · Harassment · Victimization · Adolescence

Introduction

Nowadays the Internet, Social Networks, and the media are part of adolescent's daily life. Teens use the virtual context and social media to keep in touch with friends, improve their socialization and make new friends. Social Networks play an important role, in fostering important developmental tasks: having a social support network and building one's own identity, social and sexual (Van Gool et al., 2015). Improving their peer status, expressing themselves and their creativity,

and engaging in sexual forms of self-introduction are some of the reasons teens use social media (Sheldon & Newman, 2019; Van Ouytsel et al., 2020). Thus, teenagers are particularly disposed to share personal or intimate information with their peers, but it is more difficult for them to understand the potential risks underlying these behaviors (Albert & Steinberg, 2011; Veenstra et al., 2012).

According to the Centers for Disease Control and Prevention – CDC (2019) "sexual violence can occur in person, online, or via technology, as in the cases of posting or sharing sexual pictures of someone without their consent, or non-consensual sexting". Following this definition, sexual harassment behaviors can easily be reproduced in the online context, but the two environments have different characteristics that should be noticed (Burnay et al., 2019; Van Royen et al., 2017). The online environments make aggressive behavior more easily adopted, as it suggests a (false) sense of anonymity and privacy (Gámez-Guadix et al., 2015). Also, there are no temporal and/or geographical

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limits and the communication takes place indirectly, being easier to establish contact, even with strangers (Gámez-Guadix et al., 2015). In addition, there are many varying manifestations of how abuse can be facilitated by technology (Henry et al., 2020). Technology has made it possible to have an audience anywhere and anytime, and it is getting easier and easier to incriminate someone with images and/or videos. In this sense, the Internet facilitates the spread of sexual violence and sexual harassment (Project DeShame, 2017). In addition, people behave less defensively because of the online disinhibition effect. The online disinhibition effect is defined as a reduction in behavioral inhibitions in the online environment (Suler, 2004). Factors explaining this effect include anonymity, invisibility, and asynchrony—all characteristics of the virtual world (Joinson, 2003). As a result, some aggressive behaviors that would hardly be implemented in a face-to-face environment are more easily implemented in an online environment, such as insults, hate speech, cyberbullying, and comments on public posts (Lapidot-Lefler & Barak, 2012).

In a world where relationships are often mediated by new technologies, sexual relationships have also become mediated by information and communication technologies and virtual contexts. Adolescence is a period of great vulnerability, characterized by emotional and behavioral instability, and pubertal and sexual development. Puberty begins the construction of one's sexual and gender identity, which is now much more flexibly conceptualized (Aringolo & Gambino, 2007). If managing romantic relationships is already a complicated evolutionary task for adolescents, the advent of the Internet it has made it even more urgent to talk about consent, respect and sexualization, because it is extremely easy to exchange information and encounter contents of a sexual nature online (Project DeShame, 2017). Sharing sexual information as a way to explore sexual identity is a habit that has always existed—for example through letters or direct conversation; this is a normative behavior, which allows the development of sexual expression (Walrave et al., 2018). However, when this exploration of sexuality is carried out without consent or under pressure, they can become aggressive and have unpleasant experiences.

This scenario would require a more in-depth study of the sexual aggressions that take place in the online context. However, the first barrier is found in the labels to talk about these aggressions. Many different labels have been used to define harassment, victimization, violence, and abusive behaviors on the Internet: "digital", "internet", "cyber" or "online" are the most common (Henry et al., 2020; Powell & Henry, 2017). Also, there is no clear definition of online sexual harassment (Powell & Henry, 2017; Reed et al., 2019). Online sexual harassment includes several types of behavior, such as requests for sex,

image-based harassment, sexual coercion, and hate speech (Powell & Henry, 2017). An early study dealing with sexual harassment identified certain categories of behavior as verbal requests, verbal remarks, and nonverbal displays (Gruber, 1992; Till, 1980). Fitzgerald et al. (1995), proposed a three-dimensional conceptualization of online sexual harassment, related to each other and non-overlapping: *gender harassment*, *sexual coercion*, and *unwanted sexual attention*. According to Barak (2005), these three types of offline sexual harassment also exist online. This author proposed a model for the online context that identifies two dimensions of sexual harassment: *active* and *passive*. The active form of sexual harassment refers to abusive sexual messages that are explicitly directed at a victim. In the passive forms, however, the aggressor does not refer directly to a target victim but, rather, to potential recipients. It is therefore less intrusive.

This disparity between the forms identified has affected the rates of involvement reported in the studies, being very different from each other varying from 1 to 59% (Henry et al., 2020; Reed et al., 2020). In a recent report across Denmark, Hungary, and the UK, 9% of respondents aged 13–17 years say they have received sexual threats online from people their own age in the last year. The prevalence rises significantly when other types of behavior are considered: 24% of the respondents, for example, received comments of a sexual nature on their photo (Project DeShame, 2017).

The large variety of labels, definitions, and measures existing in the literature makes it difficult to compare data relating to the prevalence and incidence of online sexual harassment. Despite numerous studies on the topic, there is still no agreement among scholars on the definition and description of online sexual harassment and as far as we know, there are no studies that systematically report information on online sexual harassment. Systematizing the information available in the literature is the first step towards increasing scientific knowledge in this area and defining keys for its prevention. The present study advances in this regard through the following aims:

1. To identify labels used to refer to online sexual harassment in the adolescent population.
2. To describe the definition of online sexual harassment, considering specific criteria that emerge from the studies (the nature of relationship between aggressor and victim, the use of abusive connotations, and the time frame in which the behaviors occur).
3. To describe different typologies of abuse in which online sexual harassment occurs, differentiating between studies that focus on the victim's point of view and studies that consider the perpetrator's point of view into account.

Method

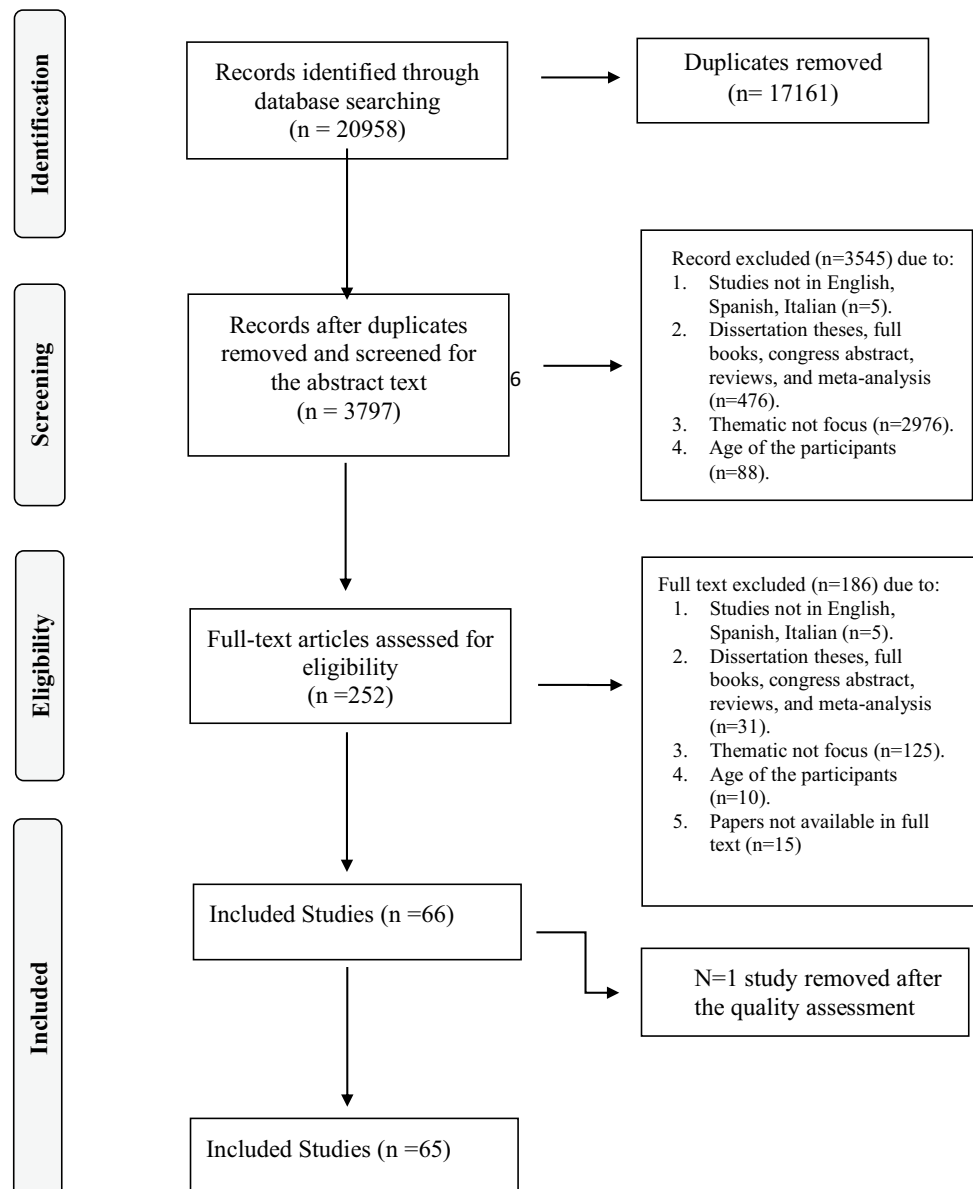
To conduct a rigorous scoping review, we followed the PRISMA guidelines (Moher et al., 2009; Page et al., 2021). The stages are summarized in the flowchart reported in Fig. 1.

Identification The search was conducted in four scientific databases: Scopus, PubMed, PsycInfo, and Web of Science. We used the following keywords, about four areas: (1) online context (keywords: online, cyber, digital, internet, virtual, "social media", "social network"); (2) sexual connotation of behavior (keywords: sex* – “sexual” in PubMed, as the database does not allow asterisk searches on words under four characters); (3) aggressive connotation of behavior (keywords: harassment, abuse, aggression, victimization,

coerci*, pressure, offen*, solicitation, violence, assault); (4) age of the sample (keywords: adolescen*, youth, teen*). An example of search combinations used is: “online AND sex* AND harassment AND adolescen*”.

Screening Overall, the search in all four databases included 20958 articles. Duplicates were excluded both automatically and manually using Zotero software, and the final literature search included 3797 records. The screening of abstracts and titles was done by two researchers, with an eye for the following inclusion criteria: (1) studies in English, Italian, and Spanish; (2) empirical research; (3) studies that include a definition and/or measure of online sexual harassment; (4) average age of participants between 11 and 19. The exclusion criteria are the following: (1) studies not in English,

Fig. 1 Flow-chart of identification, screening, eligibility, and inclusion of studies



Italian, Spanish; (2) dissertation theses, full books, congress abstracts, reviews, and meta-analysis; (3) studies that doesn't include a definition and/or measure of online sexual harassment; (4) average age of the participants lower than 11 and higher than 19. The inter-rater assessment was performed to check the decision of the inclusion/exclusion criteria. Two independent evaluators reviewed 30% of the documents, and reliability was reported with Cohen's kappa coefficient of .70. Discrepancies were resolved by comparison.

Eligibility The full text of the papers was downloaded and rated. We removed any papers not available in full text and kept the ones focused on unwanted behavior (3). Finally, 66 papers were included.

Quality Assessment Given many papers included we decided to measure the quality of the studies. Following the recommendations from the NHS Centre for reviews and dissemination (2008), we used a validated checklist

designed for quantitative and qualitative studies (Kmet et al., 2004). The original checklist comprehends 14 criteria. However, since the present study does not evaluate interventions, three of them did not apply to the designs of our study – specifically, criteria 5, 6, and 7 (random allocation, blinding of investigators, blinding of the subject) were removed from the checklist. To assess interrater reliability scores, a random selection of 30% of the papers was double-coded. It resulted in a very large agreement (95%). Discrepancies were resolved by comparison. For each criterion, researchers should rate the studies with a reference table (see Table 1) and give a rating between 0 (No), 1 (Partial), and 2 (Yes). Criteria that are “not applicable” to a particular study were excluded from the calculation of the total score. For each study evaluated, the total score is obtained by adding the evaluation for each criterion and then dividing by the total possible score (e.g. evaluating, as in this case, 11/14 criteria, the total possible score was 22). Most of the items included were evaluated as more than

Table 1 QualSyst Tool – Kmet et al. (2004)

Quantitative Studies

1. Question / objective clearly described?
 2. Design evident and appropriate to answer study question? (If the study question is not given, infer from the conclusions)
 3. Method of subject selection (and comparison group selection, if applicable) or source of information/input variables (e.g., for decision analysis) is described and appropriate
 4. Subject (and comparison group, if applicable) characteristics or input variables/information (e.g., for decision analyses) sufficiently described?
 5. If random allocation to treatment group was possible, is it described?
 6. If interventional and blinding of investigators to intervention was possible, is it reported?
 7. If interventional and blinding of subjects to intervention was possible, is it reported?
 8. Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?
 9. Sample size appropriate?
 10. Analysis described and appropriate?
 11. Some estimate of variance (e.g., confidence intervals, etc.) is reported for the main outcomes (i.e., those directly addressing the study objective upon which the conclusions are based)?
 12. Controlled for confounding?
 13. Results reported in sufficient detail?
 14. Do the results support the conclusions?
-

Qualitative Studies

1. Question / objective clearly described?
 2. Design evident and appropriate to answer study question? (If the study question is not clearly identified, infer appropriateness from results/ conclusions.)
 3. Context for the study is clear?
 4. Connection to a theoretical framework / wider body of knowledge?
 5. Sampling strategy described, relevant and justified?
 6. Data collection methods clearly described and systematic?
 7. Data analysis clearly described, complete and systematic?
 8. Use of verification procedure(s) to establish credibility of the study?
 9. Conclusions supported by the results?
 10. Reflexivity of the account?
-

adequate in their quality (final score $> .70$), except for one paper which, due to the very low score obtained (.40), was not taken into consideration for the review. Consequently, 65 papers were used for data extraction.

Coding Strategy First of all, information about geographical information, study design, average age, gender, and ethnic composition of the sample was checked. Then, to respond to the aims of our study, information about labels (1), type of relationship between aggressor and victim, the use of abusive connotations, time frame of occurring behaviors (2), typologies of online sexual harassment, associated behaviors and focus on victimization and/or perpetration (3) were checked. The information was extracted by two independent researchers, and the agreement rate was evaluated with Cohen's kappa coefficient (.90). Discrepancies were resolved by comparison. In Table 2, it is indicated what information was extracted from the studies for coding.

Results

General Characteristics of Included Studies

The 65 studies included were published between 2001 and 2021, and most were cross-sectional ($N = 50$ out of 65; 77%); some studies had a longitudinal design ($N = 6$ out of 65; 9%) and some were qualitative studies ($N = 9$ out of 65; 14%). The sample size ranged from 18 to 20834 participants. Regarding the composition of the sample, all studies were well balanced in terms of gender differences, with a range between 44% and 63.1% of females—only one study had a small percentage of females in the sample (22%). A minor proportion of studies ($N = 5$ out of 65; 7.7%) considered a sample of solely females, and one study did not report this information. The average age of the analyzed samples ranged from a minimum of 12 years to a maximum of 18.8 years old. Some of them ($N = 23$ out of 65; 35%) also reported the ethnic composition of the sample (see Table 3).

Geographically, the included studies were mainly conducted in Europe ($N = 31$ out of 65; 48%) and the United States of America ($N = 26$ out of 65; 40%), but some were conducted in other countries, such as Turkey ($N = 2$ out of 65; 3%), Australia ($N = 1$ out of 65; 1.5%), Chile ($N = 1$ out of 65; 1.5%), Cyprus ($N = 1$ out of 65; 1.5%), Malaysia ($N = 1$ out of 65; 1.5%), Taiwan ($N = 1$ out of 65; 1.5%), Thailand ($N = 1$ out of 65; 1.5%). The general characteristics of the included studies are reported in detail in Table 3.

Labels

It was immediately evident that there was a great variety of labels used (reported in Table 4). The most common label was Online (Unwanted) Sexual Solicitation ($N = 23$ out of 65; 35%). Other commonly used labels were Online Sexual Harassment ($N = 8$ out of 65; 12%) and Online Sexual Victimization ($N = 6$ out of 65; 9%). Finally, a small percentage used the label (Nonconsensual) Sexting ($N = 3$ out of 65; 5%), Online Sexual Experience ($N = 2$ out of 65; 3%), and Cyber Sexual Harassment ($N = 2$ out of 65; 3%).

Criteria for Definition

Concerning the type of relationship between aggressor and victim, in these 65 studies, we identified three different clusters: (a) papers focused on online sexual harassment among peers – (OSH-P); (b) papers focused on online sexual harassment in adolescents in the context of an unspecified relationship between victim and aggressor – (OSH); (c) papers focused on online sexual solicitation (OSS). This last group of papers was included because, although the term solicitation refers, at least theoretically, to an attack by an adult on a minor, this is often non-specified by the items described. Between this last cluster, most ($N = 14$ out of 23; 61%) did not specify the relationship between victim and aggressor. One study defined the aggressor as an unknown person, but some studies ($N = 8$ out of 23; 35%) assessed the relationship with a direct question. Most of the studies ($N = 31$ out of 65; 48%) investigated online sexual harassment in the context

Table 2 Extraction Table

<i>Coding</i>	<i>Extracted Information</i>
Labels	<i>The name used to refer to the construct</i>
Type relationship between aggressor and victim	<i>Who is the aggressor (where specified), an adult or an adolescent?</i>
Use of abusive connotations	<i>What terms are used to describe the behavior?</i>
Time frame of occurring behaviors	<i>For what period of time is the behavior verified?</i>
Typologies of online sexual harassment and associated behaviors	<i>What are online sexual harassment behaviors? What kinds of modality is used to victimize a person?</i>
Focus on victimization and/or perpetration	<i>Does the study investigate the point of view of the victim or the aggressor?</i>

Table 3 General characteristics of included studies

<i>References</i>	<i>Study Design</i>	<i>Country</i>	<i>N</i>	<i>Age: Mean/Range</i>	<i>%Female</i>	<i>Ethnic Composition</i>
Álvarez-García et al. (2016)	CS	SPA	3148	M = 14.01 (SD = 1.39)	48,1%	NR
Álvarez-García et al. (2017)	CS	SPA	3159	M = 14.01 (SD = 1.39)	48%	NR
Barroso et al. (2021)	CS	PRT	4281	M = 14.51 (SD = 1.83)	53%	NR
Baumgartner et al. (2010)	CS	DE	2092	Early M = 12.49 (SD = .51) Mid M = 14.49 (SD = .50) Late M = 16.46 (SD = .50)	49%	NR
Boer et al. (2021)	CS	NLD	20834	12–16 (n = 4846) 17–24 (n = 15988)	49,4%	D 85%, T 2,4%, M 2,1%, S 3%, A 1,2%, O 6,4%
Chang et al. (2014)	L	TWN	2315	Grade 10 and 11	NR	NR
Dahlqvist and Gådin (2018)	CS	SE	1193	14–16	52%	NR
Dönmez and Soylu (2019)	CS	TUR	189	M = 15.07 (SD = 1.18)	NR	NR
Dönmez and Soylu (2020)	CS	TUR	99	M = 14.8 (SD = 1.3)	75%	NR
Festl et al. (2019)	CS	DE	1033	M = 17 (SD = 1.9)	44%	NR
Gámez-Guadix and Incera (2021)	CS	SPA	1779	M = 13.92 (SD = 1.27)	50.92%	SP 89.43%, L 7.14%, AS 1.52%, E 0.9%, AF 0.51%, USA 0.17%
Guerra et al. (2021)	CS	CHN	18872	M = 14.54 (SD = 1.42)	50.8%	96.4% C, 3.1% SA, 0.2% in CA, 0.3% O
Helweg-Larsen et al. (2012)	CS	DK	3707	M = 15.2 (SD = .6)	49,4%	NR
Holt et al. (2016)	CS	USA	439	9 grade	50%	79.3% W
Hunehäll Berndtsson (2021)	Q	SE	18	13–16	22%	NR
Jewell et al. (2015)	CS	USA	308	M = 15	51%	59% W, 12% B, 11% L, 7% AS, 11% O
Jones et al. (2012)	CS	USA	3561	YISS-1, 2, 3	YISS-1, 2, 3	YISS-1, 2, 3
Jonsson et al. (2019)	CS	SE	5715	M = 17.97 (SD = .63)	55%	NR
Karayianni et al. (2017)	CS	CY	1080	15–18	76%	NR
Leemis et al. (2018)	L	USA	3549	M = 12.8 (SD = 1.08)	50,2%	32.2% W, 46.2% B, 5.4% L, 2.3% AS, 7.9% O
Longobardi et al. (2020)	CS	ITA	229	M = 15 (SD = 1.40)	100%	NR
Longobardi et al. (2021)	CS	ITA	310	M = 12.09 (SD = .89)	46.8%	NR
Maas et al. (2017)	CS	USA	312	M = 15.21 (SD = 1.23)	100%	46% W, 45% B, 8% MR, 0.5% L, 0.5% NA
Mandau (2020)	Q	DK	157	M = 13.63 (SD = 1.33)	100%	NR
Marret and Choo (2017)	CS	MY	1487	15–16	53.9%	69.6% Malay, 16.7% Indian, 13.6% Chinese 0.2% Other
McHugh et al. (2017)	Q	USA	68	M = 14.79 (SD = 1.30)	63%	73% W, 13% B, 5% L, 3% AS, 5% O
Méndez-Lois et al. (2017)	CS	SPA	615	M = 15 (42,9%) M = 16 (26,2%)	52%	NR
Michikyan et al. (2014)	Q	USA	245	M = 16	53,1%	45.3% W, 20.8% B, 5.7% AS, 3.7% L, 9.4% MR, 4.1% O
Mitchell (2001)	CS	USA	1501 (Yiss1)	M = 14 (SD = 2)	47%	73% W
Mitchell et al. (2004)	CS	USA	1501 (Yiss1)	M = 14 (SD = 2)	47%	73% W, 10% B, 3% NA, 3% AS, 2% L, 7% O, 2% NR
Mitchell et al. (2007a)	CS	USA	1500 (Yiss2)	M = 14 (SD = 2)	51%	73% W, 13% B, 9% NA, 3% AS, 3% L, 1% O, 3% NR
Mitchell et al. (2007b)	CS	USA	YISS-1, 2	YISS-1, 2	YISS-1, 2	YISS-1, 2
Mitchell et al. (2007c)	CS	USA	YISS-1, 2	YISS-1, 2	YISS-1, 2	YISS-1, 2
Mitchell et al. (2008)	CS	USA	1500 (Yiss2)	M = 14 (SD = 2)	51%	73% W, 13% B, 9% NA, 3% AS, 3% L, 1% O, 3% NR
Mitchell et al. (2011)	CS	USA	1500 (Yiss2)	M = 14 (SD = 2)	51%	73% W, 13% B, 9% NA, 3% AS, 3% L, 1% O, 3% NR

Table 3 (continued)

<i>References</i>	<i>Study Design</i>	<i>Country</i>	<i>N</i>	<i>Age: Mean/Range</i>	<i>%Female</i>	<i>Ethnic Composition</i>
Mitchell et al. (2013)	CS	USA	3561	YISS-1, 2, 3	YISS1,2,3	YISS-1, 2, 3
Mitchell and Stulhofer (2020)	L	HR	477	M = 15.8 (SD = 0.48)	100%	NR
Montiel et al. (2016)	CS	SPA	3897	M = 14.45 (SD = 1.59)	52.7%	NR
Morelli et al. (2017)	CS	ITA	610	M = 16.8 (SD = 1.63)	63.1%	NR
Naezer and van Oosterhout (2020)	Q	NLD	21	15–17 = 72%	60%	NR
Ojanen et al. (2015)	CS	THA	1234	M = 18.8 (SD = 2.49)	45%	94.4% Thai, 2.4% Chinese, 2.6% Mixed
Penado et al. (2019)	CS	SPA	602	M = 14.92, SD = 1.59	52.8%	NR
Priebe and Svedin (2012)	CS	SE	3432	M = 18.3	53.6%	NR
Priebe et al. (2013)	CS	USA	1560	10–17	NR	NR
Reed et al. (2019)	CS	USA	159	M = 17 (SD = 1.1)	100%	14.6% W, 17.6% AS, 2.5% NA, 3.1% B, 8.2% MR, 53.4% O
Rice et al. (2015)	CS	USA	1831	M = 15	48.2%	0.29% NA, 3.8% AS, 11.67% B, 71.73% L, 2.66% H, 8.62% W, 1.22% MR
Ringrose et al. (2021a)	Q	UK	144	M = 15	61%	NR
Ringrose et al. (2021b)	Q	UK	144	M = 15	61%	NR
Sánchez-Jimenez et al. (2015)	CS	SPA	268	M = 14.22 (SD = 1.44)	52.5%	NR
Sánchez-Jimenez et al. (2017)	CS	SPA	601	M = 14.06 (SD = 1.25)	52%	NR
Sklenarova et al. (2018)	CS	DE	2238	M = 15.5 (SD = 1.1)	53.90%	Foreign Nationality = 20.6%
Soo et al. (2012)	CS	EE	780	M = 13.7 (SD = 1.7)	50.2%	NR
Ståhl and Dennhag (2020)	CS	SE	594	M = 15.73 (SD = 1.77)	61%	NR
Taylor et al. (2019)	L	USA	1184	M = 12–14 = 39.2%	47%	79% W
Van Ouytsel et al. (2019)	CS	BEL	3109	M = 13.01 (SD = .83)	53.5%	NR
Van Ouytsel et al. (2021)	CS	BEL	1306	M = 14.97 (SD = 1.97)	50.5%	NR
Van Royen et al. (2015)	Q	BEL	83	12–18	NR	NR
Ybarra et al. (2004)	CS	USA	1501 (Yiss1)	M = 14 (SD = 2)	47%	73% W, 10% B, 3% NA, 3% AS, 2% L, 7% O, 2% NR
Ybarra et al. (2007)	CS	USA	1588	M = 13.2	50%	74% W, 13% B, 13% L, 7% MR, 6% O
Ybarra and Mitchell (2008)	CS	USA	1588	M = 13.2	50%	74% W, 13% B, 13% L, 7% MR, 6% O
Ybarra et al. (2011)	L	USA	1588	M = 13.2	50%	74% W, 13% B, 13% L, 7% MR, 6% O
Ybarra et al. (2015)	CS	USA	5907	13–18	94% (cis)	
Ybarra and Petras (2020)	L	USA	870	M = 16.7 (SD = 1.7)	49.8%	73.9% W, 12.6% L
Walrave et al. (2014)	Q	AUS	33	15–21	55%	NR
Walsh et al. (2013)	CS	USA	1560 (Yiss3)	M = 14	50%	67% W, 13% B, 10% NA, 3% AS, 3% L, 2% O, 2%

NR Not Reported; *Ethnicity*: B Black, W White, L Latinos, AS Asian, O Other, MR Multiracial, NA Native americans, H Hawaiian, D Dutch, T Turkish, M Moroccan, S Surinamese, A Antillean, SP Spain, E European, AF Africa, USA NorthAmerica, C Chilean, SA SouthAmerica, CA Central America; *Study Design*: CS Cross Sectional, L Longitudinal, Q Qualitative, MM Mixed Method

Table 4 Labels

<i>Labels</i>	<i>References</i>
<i>Online sexual Solicitation</i>	Baumgartner et al. (2010), Chang et al. (2014), Dahlqvist and Gådin (2018), Dönmez and Soylu (2019), Dönmez and Soylu (2020), Jones et al. (2012), Karayianni et al. (2017), Marret and Choo (2017), McHugh et al. (2017), Mitchell (2001), Mitchell et al. (2004), Mitchell et al. (2007a, b, c), (2008), (2011), (2013), Rice et al. (2015), Sklenarova et al. (2018), Ybarra et al. (2004), Ybarra et al. (2007), Ybarra and Mitchell (2008), Walsh et al. (2013)
<i>Online Sexual Harassment</i>	Guerra et al. (2021), Michikyan et al. (2014), Mitchell and Stulhofer (2020), Ojanen et al. (2015), Ringrose et al. (2021b), Sklenarova et al. (2018), Soo et al. (2012), Van Royen et al. (2015), Ybarra et al. (2015)
<i>Online Sexual Victimization</i>	Festl et al. (2019), Gámez-Guadix and Incera (2021), Longobardi et al. (2020), Longobardi et al. (2021), Montiel et al. (2016), Taylor et al. (2019),
<i>(Nonconsensual) Sexting</i>	Hunehäll Berndtsson (2021), Morelli et al. (2017), Van Ouytsel et al. (2019), Van Ouytsel et al. (2021), Walrave et al. (2014)
<i>Unwanted Internet Experience</i>	Priebe and Svedin (2012), Priebe et al. (2013)
<i>Cyber Sexual Harassment</i>	Leemis et al. (2018), Reed et al. (2019)
<i>Image-Based Sexual Abuse (IBSA)</i>	Mandau (2020), Ringrose et al. (2021a)
<i>Online Sexual Experience</i>	Maas et al. (2017), Ybarra et al. (2011)
<i>Cyber Aggression</i>	Álvarez-García et al. (2016)
<i>Cyber Victimization</i>	Álvarez-García et al. (2017)
<i>Abusive Sexting</i>	Barroso et al. (2021)
<i>Unwanted Exposure to sext</i>	Boer et al. (2021)
<i>Internet Victimization</i>	Helweg-Larsen et al. (2012)
<i>Online Sexual Conversation</i>	Holt et al. (2016)
<i>Potentially Offensive Sexual Behaviors (POSB)</i>	Jewell et al. (2015)
<i>Online Sexual Abuse</i>	Jonsson et al. (2019)
<i>Violencia 2.0</i>	Méndez-Lois et al. (2017)
<i>(Non consensual) Sharing</i>	Naezer and van Oosterhout (2020)
<i>Intimate Image Diffusion</i>	Penado et al. (2019)
<i>Sexual Cyber Behavior</i>	Sánchez-Jimenez et al. (2015)
<i>Peer Sexual Cyber Victimization</i>	Sánchez-Jimenez et al. (2017)
<i>Sexual Violence Perpetration</i>	Ybarra and Petras (2020)

of an unspecified relationship between the victim and the aggressor (OSH), and only a small percentage (N = 11 out of 65; 17%) focused on online sexual harassment between peers (OSH-P).

Almost all of the included studies used specific words to describe the abusive connotation of this behavior, such as unwanted, "without consent", "without permission", unsolicited, nonconsensual, and "under pressure". Most of the studies, in addition to the word "unwanted", used a more specific theoretical formulation: "unwanted and/or performed by an adult". Only two studies used a formulation such as "behaviors that make you feel uncomfortable" or "make you feel bad". Other words used were covertly and coerced. Some of the studies that did not use a specific connotation (N = 7 out of 65; 11%), checked for this with the following questions (See Table 5).

Regarding the time frame of these behaviors, most of the papers (N = 32 out of 65; 49%) investigated how often it happened, measuring the response on a Likert scale. Of these studies, most ask to refer for the past 12 months (N = 15

out of 32; 47%), some ask to refer for the last six months (N = 6 out of 32; 19%), or do not specify the reference period (N = 6 out of 32; 19%). A smaller proportion of studies ask to refer to the past 3 months (N = 2 out of 32; 6%) or to the last school year (N = 2 out of 32; 6%) and only one uses the last week as a reference period. Other studies (N = 23 out of 65; 35%) did not investigate the frequency of perpetration or victimization, but whether one has ever been a victim or not, measuring the response in a dichotomous way (i.e., Yes/No). Most of these, ask to refer to the past 12 months too and only one refers to the last 6 months. Some papers did not report information about the frequency of assessment (N = 10 out of 65; 16%) (See Table 5).

Operationalization of Typology of Abuse

Three main typologies of online sexual harassment emerged: visual, verbal, and cybersex. Within the verbal typology, all harassment behaviors that use texts or vocal notes or talking about sex, etc., have been included. The

Table 5 Criteria for definitions

<i>References</i>	<i>Cluster</i>	<i>Relation quality between victim and aggressor</i>	<i>Abusive connotation</i>	<i>Frequency</i>
Álvarez-García et al. (2016)	OSH – P	Peer-to-peer	Without permission, Unwanted	<i>In the last three months</i> R: 1 = never, 4 = always
Álvarez-García et al. (2017)	OSH	Unspecified	Without permission, Unwanted	<i>In the past three months</i> R: 1 = never, 4 = always
Barroso et al. (2021)	OSH	Unspecified	Non-consensual	<i>Have you ever...?</i> R: Y/N
Baumgartner et al. (2010)	OSS	Unspecified	Unwanted	<i>How often in the past six months?</i> R: 0 = never, 4 = six times or more
Boer et al. (2021)	OSH	Unspecified	Unwanted, Non-consensual	<i>In the last 6 months</i> R: 1 = never, 3 = more than once
Chang et al. (2014)	OSS	Unspecified	Unwanted	<i>In the last year?</i> R: never, ever before a year, seldom, sometimes, usual
Dahlqvist and Gådin (2018)	OSS	Unspecified	Unwanted	<i>In the last six months</i> R: at least one or more
Dönmez and Soylu (2019)	OSS	Unspecified	Unwanted (or performed by an adult)	<i>In the last year...?</i> R: Y/N
Dönmez and Soylu (2020)	OSS	Unspecified	Unwanted (or performed by an adult)	<i>In the last year...?</i> R: Y/N
Festl et al. (2019)	OSH	Unspecified	Unwanted	<i>Not specified period</i> R: 0 = never, 4 = 7 or more times
Gámez-Guadix and Incera (2021)	OSH	Unspecified	Unwanted, Feel bad	<i>In the last 12 months</i> R: 0 = Never, 3 = 5 times or more
Guerra et al. (2021)	OSH-P	Peer-to-peer	Feel uncomfortable, Unwanted	<i>In the last 12 months</i> R: 1 = never, 6 = each day <i>Did you ever?</i>
Helweg-Larsen et al. (2012)	OSH	Unspecified	Not specified	<i>During the past year</i> R: Y/N
Holt et al. (2016)	OSH	Unspecified	Unwanted	<i>During the past 12 months</i> R: 1 = never, 5 = 10 or more times
Hunehäll Berndtsson (2021)	OSH-P	Peer-to-peer	Non-consensual	\
Jewell et al. (2015)	OSH-P	Peer-to-peer	Not specified	<i>Not specified period</i> R: never, a few times, often, daily
Jones et al. (2012)	OSS	Controlled by specific questions	Unwanted (or performed by an adult)	<i>In the last year...?</i> R: Y/N
Jonsson et al. (2019)	OSH	Unspecified	Coerced	<i>During the last 12 months</i> R: N, Y, yes once, yes several times
Karayianni et al. (2017)	OSS	Unknown person	Unwanted	<i>How often during the last year or the occurrence or not before the last year</i>
Leemis et al. (2018)	OSH-P	Peer-to-peer	Unwanted	<i>In the last school year</i> R: not sure, never, rarely, occasionally, often
Longobardi et al. (2020)	OSH	Unspecified	Unwanted	<i>In the previous year</i> R = never, occasionally, often, always
Longobardi et al. (2021)	OSH	Unspecified	Unwanted (or performed by an adult)	<i>In the previous year</i> R: 1 = never, 4 = always
Maas et al. (2017)	OSH	Unspecified	Unwanted	<i>Not specified period</i> R: 0 = never to 4 = very often
Mandau (2020)	OSH	Unspecified	Non consensual, Unsolicited	\

Table 5 (continued)

<i>References</i>	<i>Cluster</i>	<i>Relation quality between victim and aggressor</i>	<i>Abusive connotation</i>	<i>Frequency</i>
Marret and Choo (2017)	OSS	Unspecified	Unwanted	<i>In the last year...?</i> R: Y/N
McHugh et al. (2017)	OSS	Unspecified	Unwanted	<i>In the last week</i> R: 1 = never, 5 = almost every day
Méndez-Lois et al. (2017)	OSH-P	Peer-to-peer	Without permission	<i>Not specified period</i> R: never, sometimes, a lot of times
Michikyan et al. (2014)	OSH	Unspecified	Unwanted	\
Mitchell (2001)	OSS	Unspecified	Unwanted (or performed by an adult)	\
Mitchell et al. (2004)	OSS	Controlled by specific questions	Unwanted (or performed by an adult)	<i>In the last year...?</i> R: Y/N
Mitchell et al. (2007a)	OSS	Controlled by specific questions	Unwanted (or performed by an adult)	\
Mitchell et al. (2007b)	OSS	Controlled by specific questions	Unwanted (or performed by an adult)	<i>In the last year...?</i> R: Y/N
Mitchell et al. (2007c)	OSS	Unspecified	Unwanted (or performed by an adult)	<i>In the last year...?</i> R: Y/N
Mitchell et al. (2008)	OSS	Unspecified	Unwanted (or performed by an adult)	<i>In the last year...?</i> R: Y/N
Mitchell et al. (2011)	OSS	Unspecified	Unwanted	<i>Did anyone ever...?</i> R: Y/N
Mitchell et al. (2013)	OSS	Controlled by specific questions	Unwanted (or performed by an adult)	<i>In the last year...?</i> R: Y/N
Mitchell and Stulhofer (2020)	OSH	Unspecified	Unwanted	<i>Ever (T1) or in the past 6 months (T6)</i> R: 1 = never, 5 = 6 times or more
Montiel et al. (2016)	OSH	Unspecified	Not specified	<i>In the past year</i> R: never, occasionally, often, always
Morelli et al. (2017)	OSH-P	Peer-to-peer	Without consent	<i>Not specified period</i> R: 1 = never, 5 = daily
Naezer and van Oosterhout (2020)	OSH	Unspecified	Non-consensual	\
Ojanen et al. (2015)	OSH	Unspecified	Covertly	<i>In the past year: how many times?</i> R: number of time
Penado et al. (2019)	OSH-P	Peer-to-peer	Without consent	<i>Not specified period</i> R: 1 = never, 5 = daily
Priebe and Svedin (2012)	OSH	Unspecified	Unwanted	<i>During the last 12 months:</i> R: N, Y, yes once, yes several times
Priebe et al. (2013)	OSH	Unspecified	Unwanted	<i>Did you/someone ever...?</i> R: Y/N
Reed et al. (2019)	OSH-P	Peer-to-peer	Without permission, Unwanted, Unsolicited	<i>Did you ever...?</i> R: Y/N
Rice et al. (2015)	OSS	Unspecified	Unwanted	<i>Has anyone ever...?</i> R: Y/N
Ringrose et al. (2021a)	OSH	Unspecified	Not specified	\
Ringrose et al. (2021b)	OSH	Unspecified	Unsolicited, Non-consensual	\
Sánchez-Jimenez et al. (2015)	OSH	Unspecified	Not specified	<i>In the last 6 months</i> R: 0 never, 4 always
Sánchez-Jimenez et al. (2017)	OSH-P	Peer-to-peer	Unwanted	<i>Since the school year started</i> R: 0 = never, 4 = daily
Sklenarova et al. (2018)	OSS	Controlled by specific questions	Unwanted	<i>In the past year did you ever...?</i> R: Y/N

Table 5 (continued)

<i>References</i>	<i>Cluster</i>	<i>Relation quality between victim and aggressor</i>	<i>Abusive connotation</i>	<i>Frequency</i>
Soo et al. (2012)	OSH	Unspecified	Not specified	<i>In the past 12 months, have you ever...?</i> R: Y/N
Ståhl and Dennhag (2020)	OSH	Unspecified	Not specified	<i>In the last 6 months</i> R: Y/N
Taylor et al. (2019)	OSH	Unspecified	Unwanted	<i>In the past year</i> R: never, once, or more than once
Van Ouytsel et al. (2019)	OSH	Unspecified	Non-consensual	<i>On previous 6 months...?</i> R: 1 = never, 5 = very often
Van Ouytsel et al. (2021)	OSH-P	Peer-to-peer	Non-consensual, Under pressure	<i>Did you ever?</i> R: Y/N
Van Royen et al. (2015)	OSH	Unspecified	Unwanted, Non-consensual	\
Ybarra et al. (2004)	OSS	Controlled by specific questions	Unwanted (or performed by an adult)	<i>In the last year...?</i> R: Y/N
Ybarra et al. (2007)	OSS	Unspecified	Unwanted	<i>In the last 12 months, how many times?</i> R: never to everyday
Ybarra and Mitchell (2008)	OSS	Unspecified	Unwanted	<i>During the last year?</i> R: Y/N
Ybarra et al. (2011)	OSH	Unspecified	Unwanted	<i>During the past year</i> R: Y/N
Ybarra et al. (2015)	OSH	Unspecified	Unwanted	<i>In the past 12 months how often have you been sexual harassed (for every context)</i>
Ybarra and Petras (2020)	OSH	Unspecified	Unwanted	<i>In the past 12 months</i> R: one or more
Walrave et al. (2014)	OSH	Unspecified	Unwanted	\
Walsh et al. (2013)	OSS	Controlled by specific questions	Unwanted	<i>In the last year...?</i> R: Y/N

visual typology refers to harassment that therefore uses images, photos or videos, etc., like sending or receiving photos/videos or non-consensual dissemination of photos/videos. Within the cybersex typology, we include interpersonal sexual interactions that occur via technology (in real time (Courtice & Shaughnessy, 2021; Shaughnessy et al., 2011), for example being forced to undress during a video call. In this mode, although there is no real physical contact, the involvement of both the victim and the aggressor is more direct and more active.

Most of the studies (N = 19 out of 65; 30%) had taken into consideration Verbal and Cybersex typologies, followed by Visual and Verbal typologies (N = 17 out of 65; 26%), Visual, Verbal, and Cybersex typologies (N = 12 out of 65; 18%) and the Visual one (N = 11 out of 65; 17%). A smaller proportion of studies focused only on Verbal typology (N = 2 out of 65; 3%) or Cybersex one (N = 2 out of 65; 3%), and only one focused on Visual and Cybersex typologies (See Table 6).

Overall, the point of view most investigated is victimization (N = 45 out of 65; 69%); some studies consider both victimization and perpetration (N = 13 out of 65; 20%),

a smaller proportion investigated perpetration behaviors (N = 5 out of 65; 8%) and only two studies focused also on witnessing behavior.

Discussion

This work aims to systematize the existing literature on online sexual harassment in the adolescent population, analyzing labels and operationalization of construct. Through this scoping review, it is possible to identify some key characteristics of this phenomenon: online sexual harassment has an abusive connotation, as it is perceived as unwanted by the victim, it can occur in three main typologies (verbal, visual, cybersex) and even a single episode is enough to experience victimization. In terms of relational behaviors, online sexual harassment includes unwanted sexual solicitations and non-consensual sharing and covers a wide range of behaviors using digital content (images, videos, posts, messages).

In line with the first aim of this study, through the coding of the studies included, a great variety of labels

Table 6 Operationalization of typology of abuse

<i>References</i>	<i>Cluster</i>	<i>Typologies</i>	<i>Behaviors</i>	<i>Point of view</i>
Álvarez-García et al. (2016)	OSH—P	Visual	Non-consensual production and dissemination; Threatened to share;	P
Álvarez-García et al. (2017)	OSH	Verbal – Visual	Non-consensual production and dissemination; Threatening to share	V
Barroso et al. (2021)	OSH	Visual	Non-consensual production and dissemination	V, P
Baumgartner et al. (2010)	OSS	Verbal – Cybersex	Talk about sex; Do something sexual	V
Boer et al. (2021)	OSH	Verbal – Visual – Cybersex	Send/Receive sexual content; Having sex online	V
Chang et al. (2014)	OSS	Verbal – Cybersex	Talk about sex; Do something sexual	V, P
Dahlqvist and Gådin (2018)	OSS	Verbal – Cybersex	Do something sexual; Talk about sex	V
Dönmez and Soylu (2019)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V
Dönmez and Soylu (2020)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V
Festl et al. (2019)	OSH	Verbal – Visual – Cybersex	Non-consensual production and dissemination; Threats to share; Do something sexual	V
Gámez-Guadix and Incera (2021)	OSH	Verbal – Visual	Talk about sex; Send/Receive sexual content; Ask sexual information	V
Guerra et al. (2021)	OSH-P	Verbal – Visual	Talk about sex; Send/Receive sexual content	V
Helweg-Larsen et al. (2012)	OSH	Verbal – Visual	\	V
Holt et al. (2016)	OSH	Verbal	Talk about sex	V
Hunehäll Berndtsson (2021)	OSH-P	Verbal – Visual	Non-consensual production and dissemination	V
Jewell et al. (2015)	OSH-P	Verbal – Visual	Send/Receive sexual content	P
Jones et al. (2012)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V
Jonsson et al. (2019)	OSH	Cybersex	Having sex online	V
Karayianni et al. (2017)	OSS	Verbal – Visual – Cybersex	Send/Receive sexual content; Pose for sexy pictures; Ask for meet in person	V
Leemis et al. (2018)	OSH-P	Verbal – Visual – Cybersex	Talk about sex; Do something sexual; Send/Receive sexual content	P
Longobardi et al. (2020)	OSH	Verbal – Visual – Cybersex	Talk about sex; Pose for sexy pictures; Send/Receive sexual content	V
Longobardi et al. (2021)	OSH	Verbal – Visual – Cybersex	\	V
Maas et al. (2017)	OSH	Verbal – Visual – Cybersex	Talk about sex; Send/Receive sexual content; Do something sexual	V, P
Mandau (2020)	OSH	Visual	Non-consensual production and dissemination; Sexual extortion; Send/Receive sexual content	V
Marret and Choo (2017)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V, P
McHugh et al. (2017)	OSS	Verbal – Visual	Send/Receive sexual content	V
Méndez-Lois et al. (2017)	OSH-P	Verbal – Visual	Non-consensual production and dissemination;	P
Míchikyan et al. (2014)	OSH	Verbal – Visual – Cybersex	Send/Receive sexual content; Do something sexual; Talk about sex	V
Mitchell (2001)	OSS	\	\	V
Mitchell et al. (2004)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V
Mitchell et al. (2007a)	OSS	Visual	Send/Receive sexual pictures	V
Mitchell et al. (2007b)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V
Mitchell et al. (2007c)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V
Mitchell et al. (2008)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V
Mitchell et al. (2011)	OSS	Verbal	Talk about sex	V

Table 6 (continued)

<i>References</i>	<i>Cluster</i>	<i>Typologies</i>	<i>Behaviors</i>	<i>Point of view</i>
Mitchell et al. (2013)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V
Mitchell and Stulhofer (2020)	OSH	Verbal – Visual	Send/Receive Sexual content	V
Montiel et al. (2016)	OSH	Verbal – Visual	Non-consensual production and dissemination; Send/Receive sexual content; Threatening to share; Talk about sex;	V
Morelli et al. (2017)	OSH-P	Visual	Receiving, Sending, Publicly posting	V, P
Naezer and van Oosterhout (2020)	OSH	Visual	Non-consensual production and dissemination	V, P, W
Ojanen et al. (2015)	OSH	Visual – Cybersex	Send/Receive sexual content; Do something sexual	V, P, W
Penado et al. (2019)	OSH-P	Visual	Receiving, Sending, Publicly posting	V, P
Priebe and Svedin (2012)	OSH	Visual	Non-consensual dissemination	V
Priebe et al. (2013)	OSH	Verbal – Cybersex	Talk about sex; Do something sexual	V, P
Reed et al. (2019)	OSH-P	Verbal – Visual – Cybersex	Send/Receive sexual content; Non-consensual dissemination;	V
Rice et al. (2015)	OSS	Cybersex	Having sex online	V
Ringrose et al. (2021a)	OSH	Verbal – Visual	Non-consensual dissemination; Send/receive sexual content	V
Ringrose et al. (2021b)	OSH	Verbal – Visual	Send/receive sexual content; Asking for dick pics	V
Sánchez-Jimenez et al. (2015)	OSH	Verbal – Visual	Offend; Talk about sex; Send/Receive sexual content	V, P
Sánchez-Jimenez et al. (2017)	OSH-P	Verbal – Visual	Talk about sex; Send/Receive sexual content	V
Sklenarova et al. (2018)	OSS	Verbal – Visual – Cybersex	Talk about sex; Do something sexual; Send/Receive sexual content	V
Soo et al. (2012)	OSH	Verbal – Visual	Send/Receive sexual content	V
Ståhl and Dennhag (2020)	OSH	Verbal – Visual	Offend; Send/Receive sexual content	V
Taylor et al. (2019)	OSH	Verbal – Visual – Cybersex	Offend; Talk about sex; Do something sexual	V
Van Ouytsel et al. (2019)	OSH	Visual	Send/Receive sexual content; Forwarding	V, P
Van Ouytsel et al. (2021)	OSH-P	Visual	Send/Receive sexual content; Forwarding	V, P
Van Royen et al. (2015)	OSH	Verbal – Visual	Offend; Non-consensual production and dissemination;	V
Ybarra et al. (2004)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V
Ybarra et al. (2007)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V, P
Ybarra and Mitchell (2008)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V
Ybarra et al. (2011)	OSH	Verbal – Visual – Cybersex	Talk about sex; Do something sexual; Pictures by telephone messages	V, P
Ybarra et al. (2015)	OSH	Verbal – Cybersex	Talk about sex; Do something sexual	V
Ybarra and Petras (2020)	OSH	Verbal – Cybersex	Talk about sex; Do something sexual	P
Walrave et al. (2014)	OSH	Visual	\	V, P
Walsh et al. (2013)	OSS	Verbal – Cybersex	Talk about sex; Ask sexual information; Do something sexual	V

used to refer to online sexual harassment emerges: Online (Unwanted) Sexual Solicitation, Online Sexual Harassment, and Online Sexual Victimization seem to be the most suitable labels for referring to the phenomenon. Nonetheless, some papers use specific labels—*Potentially Offensive Sexual Behavior* (Jewell et al., 2015) or *Imaged-Based Sexual Abuse* (Mandau, 2020; Ringrose et al., 2021a, b)—while others use very general labels, with the risk of not providing a real conceptual reference—*Online*

Sexual Experience (Maas et al., 2017) or *Unwanted Internet Experience* (Priebe et al., 2013). The use of such different labels probably depends on the conceptualization of the phenomenon, on the behaviors and/or situations that the researchers intend to investigate, for example: *Imaged-Based Sexual Abuse* is a label with a clear reference to a behavior perpetrated via visual typology, but online sexual harassment, as we will discuss later, can also be verbal.

To describe the phenomenon, in line with the second aim of the study, some criteria have been investigated: the type of relationship between aggressor and victim, the use of abusive connotations, and the time frame of occurring behaviors.

Regarding the criteria for the definition, we identified three clusters among the included studies: (a) papers focused on online sexual harassment among peers – (OSH-P); (b) papers focused on online sexual harassment in adolescence in the context of an unspecified relationship between victim and aggressor – (OSH); (c) papers focused on online sexual solicitation (OSS). One of the limitations identified refers to the wording of the instruments. In some cases, it is not made explicit who the aggressor is, so these instruments – all the studies of cluster (b), and some of the studies of the cluster (c) – Baumgartner et al., 2010; Chang et al., 2014; Dahlqvist & Gådin, 2018; Dönmez & Soylu, 2019, 2020; Marret & Choo, 2017; McHugh et al., 2017; Mitchell, 2001; Mitchell et al., 2007c, 2008, 2011; Rice et al., 2015; Ybarra et al., 2007; Ybarra & Mitchell, 2008 – could be evaluating online sexual harassment between peers but also perpetrated by adults or unknown people: this may affect the prevalence rates, making it difficult to get an accurate picture of the presence of sexual harassment. The characteristics of this phenomenon remained substantially unchanged about online sexual harassment that occurs in the context of unspecified relationships between victim and aggressor (OSH), and online sexual harassment among peers (OSH-P). The type of relationship that exists between victim and aggressor is an important criteria in the conceptualization of the phenomenon, especially in reference to the prevention. Even if the behaviors suffered by the victim or perpetrated by the aggressor were similar, the risk and protective factors and the negative consequences of the behavior would be different.

Among the included studies there is good agreement about the abusive connotation of the behavior; in fact, this is specified by terms such as unwanted, unsolicited, “without permission”, “without consent” or nonconsensual, that are used to describe online sexual harassment. This is an important characteristic in defining the phenomenon. In adolescence it is not uncommon for friends to confront and share private information: in fact, there are several types of behaviors in the online context that relate to this. The exchange of explicit sexual content does not take place exclusively in the context of a romantic relationship but can also take place among peers. In the peer context, the exchange of personal and/or sexual information is likely, due to the strong sense of friendship that has been established. The characteristics of cyberspace also facilitate communication and encourage self-disclosure (Valkenburg & Peter, 2011). However, the exchange of personal and sexual information can be a particularly risky situation: when content of any kind goes online, the publisher loses completely the control of it so anyone can save it on their device with a

simple screenshot and re-use it at any time. When the sexual content is distributed without consent it is particularly serious and harmful to the victim, because it’s not easy for adolescents to fully understand what is acceptable and what is not (Shariff, 2014). Exchanging sexual messages (pictures, images, or text), especially between romantic partners, is a common behavior during adolescence: 22% of the children aged 12–16 have received sexual message(s) in the past year (Smahel et al., 2020). This is a risky behavior (and can also have legal consequences) that results from teenagers' need to explore their sexuality. When it is done “without consent” or “unwanted” it becomes abusive and aggressive. In fact, even when studies do not use a specific word, they investigate with subsequent questions whether the behavior was desired or not. Only two studies (Gámez-Guadix & Incera, 2021; Guerra et al., 2021) used phrases such as “behaviors that make you feel uncomfortable” or “make you feel bad”. In this sense, in addition to highlighting the abusive connotation of the behavior, reference is also made to the negative consequences they can have for the victim.

There is great variability also concerning the time frame of online sexual harassment: some studies ask how often a behavior has occurred, while others ask preliminarily if it ever happened. Most studies refer to the last year, others to the last six months, and still others do not specify a reference period for which the victim may have experienced sexual harassment online. The studies reviewed did not consider the severity of the behaviors, although greater severity of online sexual harassment may be related to behavior occurring more than once or being coercive rather than just simply unwanted. Future studies should deepen this line of research.

The third goal of this study was to describe different typologies of online sexual harassment. Analyzing included studies, three main typologies emerged: verbal, visual or cybersex. The cybersex typology was separated from the visual one because cybersex refers to interpersonal sexual interactions that occur via technology (i.e., webcams), in real-time (Courtice & Shaughnessy, 2021; Shaughnessy et al., 2011). The included studies hardly took into consideration a single typology of sexual harassment. Verbal and cybersex typologies are more frequent in papers of cluster (c) – OSS, while the visual typology is linked to studies that are also focused on non-consensual sharing of intimate images or pressured sexting. Typologies in which online sexual harassment is carried out among peers are mainly verbal and visual. Less frequent is the presence of the cybersex typology. Taking into consideration the OSS studies that checked whom the aggressor was (and therefore excluded that he was an adult), verbal and cybersex typologies also become recurrent. Within these typologies there are various behaviors: sending/receiving sexual content—text messages, notes, etc.; offenses; spreading rumors; talking about sex; asking for sexual information (verbal); non-consensual

production and dissemination; publicly posting; sending/receiving sexual content such as images, pictures, video, etc. (visual); doing something sexual or having sex online (cybersex). Nonconsensual dissemination of explicit sexual content could be one of the most serious: it is defined as “sharing sexually explicit materials (images, photos and/or videos), without the consent of the people depicted”, without a clear motivation for sharing and in any case not linked to revenge (Walker & Sleath, 2017, p.10). Some online sexual harassment behaviors are similar to sexual cyberbullying and cybervictimization behaviors, especially if they occur in a peer context. The two phenomena could therefore be correlated to each other and have some overlap: future studies should investigate this issue.

Thus, some studies have related this form of abuse with serious consequences on mental health adjustment, such as a decrease in self-esteem (Bates, 2017; Walker & Sleath, 2017). This behavior can also be defined as revenge porn: this revenge is carried out by the person who owns a photo or video with explicit sexual content, usually of his/her ex-partner, and who decides to disseminate the content publicly (Walker & Sleath, 2017). Unwanted solicitations instead (cfr. talking about sex; asking for sexual information) concern a type of action with the purpose of recall or incentive, which tends to be even more sporadic, but no less stressful.

Only among the analyzed studies focusing on OSH-P, online sexual harassment is more balanced between victimization and perpetration: in fact, online harassment between peers could also be the continuation of behavior that began face-to-face. (Hill & Kearl, 2011). Most studies focus only on the victim's point of view. One of the characteristics of online abuse is anonymity for the perpetrator (Valkenburg & Peter, 2011): many studies do not check the relationship between the victim and aggressor and therefore focus on the point of view of the victim. This is not only due to the characteristics of online abuse, but also to the problems that can be encountered in investigating the aggressor's point of view. Social desirability bias (SDB) is the propensity "to make oneself look more attractive in terms of prevailing cultural norms in responding to specific survey questions" (Krumpal, 2013). Research to date has demonstrated that socially unacceptable actions including drug use, binge drinking, abortion, and sexual risk-taking are frequently underestimated in surveys, just as racism, sexism, and other socially unacceptable beliefs are (Krumpal, 2013; Rinken et al., 2021). However, analyzing the perpetrator's point of view is very important: especially in the context of peer dynamics, there may not be a true awareness of the seriousness of the behavior being adopted and this is a key point for the prevention and intervention programs.

In defining online sexual harassment in general, most studies refer to existing theories that are adapted to the online context (Barak, 2005; Fitzgerald et al., 1995).

However, some behaviors can only exist offline (all those that include physical contact), and some only online (for example, forwarding sexually compromising photos or messages to third parties). Understanding the differences between the two contexts, in deepening the forms of risky sexual behavior, is important to develop preventive interventions to decrease their prevalence (Mori et al., 2019) and raise awareness.

Leemis et al. (2018) and Taylor et al. (2019) took the definition of "sexual harassment at school", by Hill and Kearl (2011, p. 6): sexual harassment includes unwanted behaviors that can be "making verbal or written comments, making gestures, displaying pictures or images, using physical coercion, or any combination of these actions. It can take place in person or through electronic means such as text messages and social media".

Online sexual solicitation, instead, is characterized by the solicitations of the aggressor who tries to talk about sex with the victim, receive unwanted sexual information or push the victim to do something sexual. Unwanted OSS are invitations to talk about sex, to do something sexual or to share sexual relations (Marret & Choo, 2017) and were defined by Finkelhor et al. (2000) as online requests of youth to engage in sexual activities or sexual talk or give personal sexual information that were unwanted or, whether wanted or not, were made by an adult. This conceptualization usually refers to sexual harassment of a minor by an adult. The World Health Organization (2003) defined sexual abuse as the set of actions carried out by an adult with force, to satisfy their sexual desires towards a minor (unable to fully understand what's happening). Unwanted OSS can be described as a form of contactless sexual abuse (Dönmez & Soyulu, 2019), but in some conceptualizations, there's no reference to the age of the perpetrator. For example, Ybarra et al. (2007, p. S32) defined unwanted OSS as “the act of encouraging someone to talk about sex, to do something sexual, or to share personal sexual information, even when that person does not want to”. Future studies could use labels other than "solicitation" to refer to online sexual harassment among adolescents, and additionally use questionnaires or scales to clarify whether the abuser is a teenager or an adult.

Conclusions

Finding an agreement in the definition of online sexual harassment is of primary importance to conduct accurate studies concerning a certain phenomenon. The speed with which platforms and digital tools evolve, and the emergence of ever-new ways to share personal information of all kinds, make it difficult to summarize in a single theoretical definition all that online sexual harassment can be.

As the results of this work show, in order to address online sexual harassment among adolescents, studies must take into account certain characteristics that make it possible to define and understand the phenomenon as a whole, differentiating it from others such as the harassment of minors by adults: the format of the shared content (visual, verbal), the type of relationship that exists between the victim and the perpetrator and the type of content sharing (sending, forwarding, non-consensual sharing).

Perhaps there are so many definitions of online sexual harassment because there are so many things' people can do online, and each platform and/or digital tool offers different possibilities. In addition, digital tools are evolving rapidly, and this is reflected not only in the conceptualizations of online sexual harassment but also in the labels that are used to refer to it. The different terminology present in the literature may be due to the rapid development of the social devices, the social media, etc. which makes this a living issue that is likely to change in the next few years. We should consider online sexual harassment as a form of sexual interaction via digital technology (Döring et al., 2021) – *i.e.*, people experiencing a computer-mediated interpersonal sexual interaction via sexually explicit text-based, photo-based, audio-based, or video-based communication with each other; but the behavior is described as "unwanted by the victim". Thus, the key aspect that defines online sexual harassment is consent. Online sexual harassment is any interpersonal interaction involving sexually explicit content, that is sent or forwarded through the use of digital technology and is perceived as unwanted by the victim.

Limits and Future Directions

This work has some limitations: first, only empirical works in English, Spanish and Italian were included, excluding gray literature: it is, therefore, possible that some works with important results have been excluded. Moreover, we used only four databases for our research. Additionally, we mainly focused on the analysis of the theoretical and descriptive aspects of online sexual harassment in adolescence. Furthermore, contextual, and individual factors that can contribute to the definition of the phenomenon in adolescence have not been examined (e.g., attitudes towards violence and aggression, peer's norms, etc.). Future studies might investigate psychometric properties of scales and measures used for investigating the phenomenon and consider also the specific dynamics of adolescence and the online context, to learn more about the phenomenon, to raise awareness among young people and help them deal with the possible negative consequences.

Concerning cyberspace, it is important to better analyze the characteristics of online sexual harassment highlighting the differences with the face-to-face context. The lack of agreement in the literature for definition and measurement of online sexual harassment makes it particularly difficult to have a clear picture of its prevalence and incidence within the adolescent population.

Considering that one of the characteristics of online sexual harassment is that it may happen only once, distinguishing between different levels of severity is fundamental to be able to raise awareness and prevent the most negative consequences. It is necessary to understand whether online sexual harassment is a similar phenomenon to sexual cyberbullying or whether it is possible to identify specific characteristics. For example, online sexual harassment may occur only once: like cyberbullying, a single episode is enough to generate many repetitions of victimization, due to no temporal or geographical limits (Menesini et al., 2012). Future studies should investigate the phenomenon of online sexual harassment by taking into consideration all the behaviors that characterize it, to know its prevalence and better understand the phenomenon about gender, age, and the association that may exist with sexual cyberbullying.

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