



Online Child Sexual Exploitation and Abuse of Children and Adolescents with Disabilities: A Systematic Review

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Abstract: Online child sexual exploitation and abuse (OCSEA) is a rising global problem affecting children and adolescents worldwide. Despite the escalating prevalence of OCSEA, there is limited research specifically focusing on children and adolescents with disabilities. To bridge this gap, this systematic review was conducted to identify the prevalence, nature and associated risk factors of OCSEA of children and adolescents with disabilities. Following the PRISMA Statement, this systematic review included scientific evidence from 12 academic databases and the gray literature published between 1993 and 2023. A total of 13 studies were extracted, and thematic analysis was conducted to analyze the data. The findings of this systematic review reveal the characteristics such as the gender, age and type of disabilities of OCSEA victims. Perpetrators use diverse techniques, including online grooming, manipulation, and cyber-threats, resulting in consequences such as mental health issues and social isolation of victims. The associated risk factors include lack of parental monitoring, social isolation, and low risk perception. The results of this research provide crucial insights into OCSEA of children and adolescents with disabilities, emphasizing the need for targeted interventions and further exploration in this understudied area.



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1. Introduction

Violence against children is a global problem that represents a pressing concern for both their health and their development. Such violence is manifested in various ways, such as physical, sexual, or emotional violence, as well as neglect [1]. The adverse effects that violence encompasses are varied and include a spectrum of immediate and enduring impact in terms of health, such as heightened mortality rates, cognitive deficits, and challenges to both physical and mental wellbeing [2]. In recent decades, online child sexual exploitation and abuse (OCSEA) is becoming an increasingly prevalent and concerning issue owing to the escalating use of technological devices and access to the Internet [3,4].

It is important to underline that the Internet is not creating these crimes; however, these advancements in technology, when misused, have expanded the scope and capabilities of child sexual abuse on a broader scale [5]. Children and adolescents engaging with the Internet at a young age, possessing personal devices such as phones and tablets, and having increased online activity can become susceptible to heightened online risks [6]. A recently conducted study, among which a nationally representative cohort of 2639 young adults was sampled, revealed that historical incidents of OCSEA were self-reported by 15.6% of the sample and included image-based sexual abuse (11.0%), self-generated child sexual abuse images (7.2%), nonconsensual sexting (7.2%), online grooming by adults (5.4%),

revenge pornography (3.1%), sextortion (3.5%), and online commercial sexual exploitation (1.7%) [7].

According to WeProtect Global Alliance [8], there has been an increase in the volume of child sexual abuse materials of 87% since 2019 according to data from the National Center for Missing and Exploited Children (NCMEC). Simultaneously, in some countries, 1/5 of children have become victims of OCSEA [8]. As emerging technologies continue to evolve, providing new resources for communication, perpetrators adjust their methods accordingly to commit OCSEA. Various online spaces, including social networking sites, peer-to-peer networks, online gaming platforms, and the dark web, serve as extensive territories where malicious content can be disseminated, allowing offenders to target their victims [6]. In an investigation which involved the analysis of transcripts documenting interactions between five offenders and their victims, it was observed that certain perpetrators employed indirect and intricate methodologies to cultivate relationships with minors, including online grooming [9].

The scientific literature [10] highlights the importance of the identification of certain risk factors that facilitate the early detection of harmful interactions and assist with the prioritization of cases regarding OCSEA. Despite the escalating prevalence of OCSEA, however, there is limited research specifically focusing on how this issue affects children with disabilities. This gap highlights the need for targeted research efforts to comprehensively understand and address the specific challenges faced by this population.

In accordance with the Convention on the Rights of Persons with Disabilities [11], people with disabilities are defined as persons with enduring physical, mental, intellectual, or sensory impairments. These difficulties, when combined with barriers to their learning and participation, may impede their complete and equitable engagement in society, contrasting with the participation levels of others [11]. In this context, children and adolescents with disabilities are in a vulnerable situation of experiencing violence, and particularly CSEA [2,12].

Children and adolescents with disabilities can face an elevated risk of experiencing OCSEA, primarily because they may lack the ability to comprehend what is happening and may also have limited communication skills to articulate their distress or concerns [13]. Moreover, this issue may be especially challenging for this population as they may find it more difficult to understand the meaning of consent within relationships.

Consequently, the main objective of this systematic review was to identify the prevalence, nature, and associated risk factors of OCSEA of children and adolescents with all types of disabilities.

For prevalence, we aimed to understand the age, gender and types of disabilities of children and adolescents with disabilities who have encountered any form of OCSEA. Nature encompasses the characteristics and attributes of the abuse or forms of OCSEA faced by children and adolescents with disabilities. Specifically, nature includes the various types of OCSEA, perpetrators, and the frequency and consequences of OCSEA. Last but not least, risk factors include the conditions, elements, or situations that elevate the likelihood of children and adolescents with disabilities experiencing OCSEA.

2. Methods

This study is a systematic review that synthesizes the existing scientific knowledge referring to OCSEA of children and adolescents with disabilities. The goal was to minimize bias by identifying, assessing, and synthesizing all relevant studies on this specific subject including other systematic reviews, empirical qualitative and quantitative studies, and literature reviews. Adhering to internationally recognized systematic review guidelines, the PRISMA Statement was meticulously followed in this research [14].

The searches were conducted across 10 global databases, including Child Development & Adolescent Studies, The Cochrane Library, EBSCO (ERIC), MEDLINE, PsycINFO, PubMed, Scopus, Web of Science (WoS), WoS Core Collection, and Sociology Source Ultimate. Additionally, two Spanish databases, Latindex and SciELO, were searched. Gray

literature sources, including NGO reports from UNICEF, Save the Children and Raising Voices, WeProtect Global Alliance, and the Internet Watch Foundation, among others, were searched. We also conducted citation tracking to identify eligible studies.

The searches focused on English and Spanish publications, including journal articles, reports, books, or book chapters published between 1993 and 2023. The inclusion criteria were guided by a three-pronged approach, considering the condition, context, and population (CoCoPop) framework [15]. The CoCoPop framework was employed for research inquiries centered on etiology, predominantly to examine associations between specific risk factors or exposures and a given outcome [15].

Search terms and keywords were developed and adapted in different databases (see Table 1). This procedure facilitated the retrieval of all the existing information pertinent to the review questions. Following the selection of search terms, the subsequent step entailed the execution of searches within each chosen database. This phase adhered closely to the distinctive parameters and search functionalities inherent to each database, recognizing the importance of optimizing the effectiveness of the retrieval process. The search terms were also translated into Spanish in the case of the Latindex and SciELO databases (see Table A1 in the Appendix A).

Table 1. Search strategy in English.

	Search Terms
Context	"online sex* abus*" OR "online sex* exploit*" OR "online sex* viol*" OR "online sex* exploit* and abus*" OR "online sex* blackmail*" OR "online sex* harass*" OR "online sex* crim*" OR "online sextort*" OR "prohibited images" OR "live streaming" OR "online grooming" OR "online coercion" OR OCSE OR OCSA OR OCSEA
Condition	disability OR disabilities OR disab* OR "autism spectrum disorder" OR autism OR "intellectual disability" OR "learning disabilities" OR disabled OR impairment OR "physical disabilit*" OR "vision impairment" OR "blind" OR "deaf*" OR "hearing loss" OR "mental illness" OR "brain injury"
Population	child* OR adolescen* OR infant* OR baby OR babies OR toddler* OR "young person*" OR "young people" OR youth* OR teen* OR preteen* OR pre-teen* OR "preteen*" OR kid* OR prepub* OR pre-pub* OR "pre pub*" OR post-pub* OR postpub* OR "post pub*" OR pubescen* OR pubert* OR juvenile* OR underage* OR minor* OR boy* OR girl* OR preschool*

The inclusion criteria involved all types of studies and reviews using qualitative, quantitative, and mixed methods that were published between 1993 and 2023, incorporating research that focused on children and adolescents, ranging in age from birth to 18 years old, with all types of disabilities. Additionally, adults with disabilities who experienced OCSEA when they were under 18 years old were also considered. Studies that incorporated perspectives from the families, caregivers, or teachers of these individuals were also deemed eligible for inclusion. The exclusion criteria included studies with adults with disabilities, as well as studies not referring to OCSEA. Additionally, studies involving children and adolescents without disabilities or studies not published in English or Spanish were also excluded.

The studies considered for inclusion should contain data for any of the following three dimensions of OCSEA: (1) For prevalence: victim age, gender, and types of disabilities. (2) For nature: the characteristics and attributes of the abuse or forms of OCSEA faced by children and adolescents with disabilities; the characteristics and types of perpetrators, the techniques used, duration and frequency of the abuse, and consequences suffered by the victims. (3) For associated risk factors: the conditions, elements, or situations that elevate the likelihood of children and adolescents with disabilities experiencing OCSEA, for example, the absence of parental monitoring and a lack of supervision of online activity,

and other vulnerabilities. This study's protocol was registered in PROSPERO under ID: CRD42023414289.

3. Results

The screening process was conducted using Covidence (a systematic review management tool), and a PRISMA flow diagram was generated by this tool (See Figure 1). The initial results from the searches (1663 articles) were imported to Covidence; duplicates were automatically removed by Covidence. Additionally, three studies were identified: two from the gray literature and one from citation tracking.

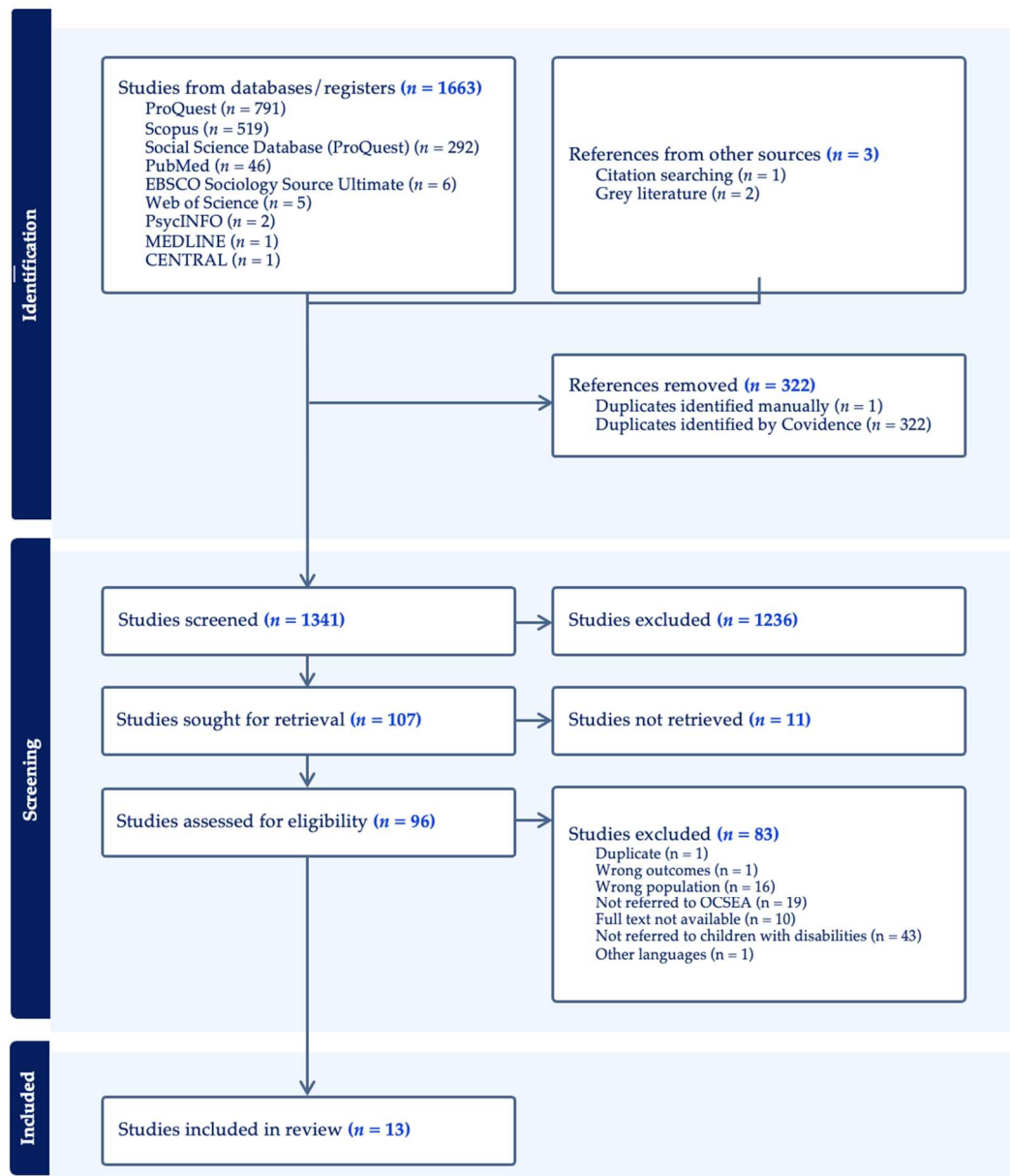


Figure 1. PRISMA flow diagram generated with Covidence.

The initial searches involved the retrieval of 1663 articles through comprehensive searches across diverse databases and registers. The distribution across various sources revealed a predominant presence in ProQuest (791 articles) and Scopus (519 articles), alongside contributions from other databases, such as Social Science Database (ProQuest), PubMed, EBSCO Sociology Source Ultimate, Web of Science, PsycINFO, MEDLINE, and

CENTRAL. Additionally, three articles were obtained from references from other sources, one through citation searching, and two from gray literature. Notably, 323 articles were removed, including duplicates identified both manually (1 article) and through the Covidence tool (322 articles). During the initial screening phase, a total of 1343 studies were screened based on their titles and abstracts. Out of this cohort, 1236 studies were excluded based on the established criteria, and 107 were sought for retrieval.

Then, in the second phase of screening processes, full texts were consulted to consider the eligibility of the studies. The final number of the studies retrieved was 96, as 11 full-text articles were not available, and the information was not provided after contacting the authors. An additional 83 studies were excluded because they did not meet the inclusion criteria. For example, one study was omitted for reporting non-relevant outcomes, 16 were excluded as they focused on a non-relevant population. Additionally, 20 studies did not reference OCSEA, while 43 studies were not about children and adolescents with disabilities. Furthermore, three studies were excluded as they were not published in English nor Spanish. A total of 13 studies were included in the final data synthesis. Throughout the process, two reviewers (GÁ-G, KKG) independently examined the references to identify those that met the criteria for inclusion based on the title/abstract and full text, and any conflicts that occurred between the reviewers were resolved.

An adaptation of the Cochrane Risk of Bias Tool (RoB 2) [16] is the recommended instrument for evaluating bias in various types of studies. RoB 2 is organized into specific bias domains, each focusing on different aspects of design, implementation, and reporting of a study. Within each domain, a set of questions is presented to extract information regarding features pertinent to bias. The studies can be rated as either ‘Low’ or ‘High’ depending on the criteria established by RoB2 [16] (see Table A2 in the Appendix A). Two reviewers (GÁ-G and KKG) assessed the quality of the studies, and a third reviewer was also consulted (ML) to resolve any conflicts. Five studies were rated [17–21] as a high risk of bias, and eight were rated as a low risk of bias [4,13,22–27]. The characteristics of included studies are included in Table 2.

Table 2. Studies included.

Study ID	Type of Study	Country/Region	Population
Online risk for people with intellectual disabilities [22]	Literature review	Not applicable	Children and adolescents with intellectual disabilities
Psychological Distress and Its Mediating Effect on Experiences of Online Risk [23]	Quantitative study	England, United Kingdom	A population of 15,278 children and adolescents between 11- and 17 years old including disability
Online Grooming as a Manipulative Social Interaction [20]	Case study	Not specified	Adult victim with disability of online grooming when she was a child
Making Sure Your Home Doesn’t Have an Open Door to Child Sexual Abusers [19]	Report (Qualitative)	Not specified	Children and adolescents with disabilities
Mapping Real-World to Online Vulnerability in Young People with Developmental Disorders: Illustrations from Autism and Williams Syndrome [17]	Literature review	Not applicable	Children and adolescents with Autism and Williams Syndrome
Cibervíctimas con discapacidad: cuestionares victimológicas y retos forenses [21]	Editorial—review	Not applicable	Children and adolescents with disabilities
A global systematic scoping review of literature on the sexual exploitation of boys [24]	Systematic review	Not applicable	Children and adolescents (boys) with physical disabilities that experienced child sexual exploitation

Table 2. Cont.

Study ID	Type of Study	Country/Region	Population
Cybervictimization of Young People with an Intellectual or Developmental Disability: Risks Specific to Sexual Solicitation [27]	Literature Review	Not applicable	Children and adolescents with disabilities
Seeking Justice and Redress for Victim-Survivors of Image-Based Sexual Abuse [25]	Qualitative study	United Kingdom, New Zealand, Australia	Children and adolescent victims of image-based sexual abuse
Online Grooming: Factores de Riesgo y Modus Operandi a Partir de un Análisis de Sentencias Españolas [4]	Quantitative study	Spain	A sample of 20 abusers and 65 victims of OCSEA Children and adolescents with and without disabilities
Mapping online child safety in Asia and the Pacific [26]	Literature review	Not applicable	Children and adolescents with disabilities
Youth Sexual Exploitation on the Internet: DSM-IV Diagnoses and Gender Differences in Co-occurring Mental Health Issues [13]	Quantitative study	Europe, America	A total of 512 youth and adolescents with disabilities receiving mental health services
The Sexual Exploitation and Abuse of Deaf and Disabled Children Online [18]	Report (Quantitative)	Global	Children and adolescents with disabilities

The data from the included studies were extracted using deductive thematic analysis [28] informed by the categories identified in the previous literature reviews, including prevalence, nature, and associated risk factors. An Excel sheet was created to categorize all the information retrieved from the studies.

3.1. Prevalence

Thirteen studies included information related to the prevalence of OCSEA of children and adolescents with disabilities. The findings from this section provided insight into the characteristics of OCSEA victims, such as their age, gender, and types of disabilities.

3.1.1. Victim Age

The role of age in determining vulnerability to OCSEA is emphasized in the included studies [20].

A diverse range of victim ages is evident in the context of OCSEA, all of which are under the age of 18 [24], typically commencing as early as 6–7 years old and extending through to early adolescence to mid-adolescence [23]. Three studies specifically mentioned early adolescence, encompassing children and adolescents aged 12–15 [4] and 11–13 years [19]. In a study focused on youth sexual exploitation on the Internet involving adolescents with mental health challenges, participants ranged from under 13 years old (18%) and 15 to 17 years old (50%), with a mean age of 14.28 years (standard deviation = 1.945) [25]. One review found that across the included studies, age exhibited a positive association with the online risk of children and adolescents with autism and Williams syndrome [17].

3.1.2. Victim Gender

The gender distribution of victims in OCSEA varies across studies. Most studies did not disaggregate their sample by gender, but both male and female individuals were identified as victims of OCSEA. In a study involving 65 participants with and without disabilities, 46.2% ($n = 30$) of the victims were females, while 53.8% ($n = 35$) were males [4].

In another study involving 75 adult survivors of image-based sexual abuse with and without disabilities, 89.3% of the participants were identified as women ($n = 67$), 8% as men ($n = 6$), 1.3% as trans individuals ($n = 1$), and 1.3% self-identified as ‘other’ ($n = 1$). Moreover, 24% ($n = 18$) of the participants identified as living with a disability [25], but information about their gender was not provided.

One study also found that LGBTQ+ children and young people with disabilities may be at a higher risk for OCSEA victimization. For example, according to the findings of a study focusing on 20 perpetrators of OCSEA where all identified victims were male, 45% of the victims identified as heterosexual, while 55% identified as homosexual [4].

3.1.3. Types of Disabilities

According to one study [24], boys with disabilities, particularly those with severe physical disabilities, may face an elevated risk of suffering from OCSEA. Additionally, the study highlights cognitive or intellectual disabilities as a risk factor, indicating a potential vulnerability among this specific group.

Several studies mention that children and adolescents with disabilities are identified as vulnerable to online victimization [4,20,23]. Specific disabilities are mentioned, including autism spectrum disorder (ASD) [17,26,27], Williams Syndrome [17,26], intellectual disabilities [22,26,27], 22q11 deletion syndrome (which involves developmental delays and may face mild intellectual disability or learning disabilities) [26], and physical disabilities [23,25] including deafness [18], and chronic health problems [25]. However, it should be noted that this does not imply that these specific groups of children have a higher likelihood of experiencing OCSEA, but they were identified as victims in the studies reviewed.

3.2. Nature

3.2.1. Perpetrators' Characteristics and Techniques Employed

Studies revealed that perpetrators of OCSEA of children and adolescents with disabilities can be both men and women, at varying ages. The most employed platforms for initial contact were social networks in 50% of cases ($n = 10$), followed by WhatsApp (25%, $n = 5$); in WhatsApp, the victims were acquainted with the offenders. Other platforms used less frequently by perpetrators were dating websites (15%, $n = 3$) and video games (10%, $n = 2$) [4].

In the case of the types of the perpetrators based on the types of offences, the following categories were identified: grooming [4,19,27], cyber-bullying [13], cyber-stalking [13], sextortion [13], or revenge porn [13]. In terms of the relationship to the victim, perpetrators included family members [23,24], educators [23,24], religious individuals [23,24], peers [23,24], neighbors [23,24], trusted individuals [23,24], and people met online as groomers [4,17,25] and cyber-bullies [13,26]. Grooming was highlighted in the studies; this is a tactic employed by offenders that involves harming children and adolescents through OCSEA [4,19].

Individuals who committed OCSEA used different tactics such as deception, coercion, corruption, and captivation to manipulate their victims [4]. In addition, the studies analyzed reveal that perpetrators employ various techniques, such as manipulation [23,27], cyber-stalking [13], coercion [27], providing gifts to victims [23], cyber-threats [13,21,23,26,27], cyber-harassment [13,26], sexting [13,21], sextortion [13], grooming [4,13,19,27], and digital alteration of images [21].

For victims with ASD and 22q11 deletion syndrome [26], the reported occurrences included cyber-threats, cyber-harassment, and grooming [25]. Victims with Williams Syndrome [17], on the other hand, faced circumstances involving receiving gifts [23]. Furthermore, those with Williams Syndrome and ASD [26] shared experiences of perpetrators providing them with gifts in their experience of OCSEA [23], and encountered cyber-threats, cyber-harassment, and grooming, akin to the occurrences reported by individuals with 22q11 deletion syndrome [26] and intellectual disabilities [22]. Instances of coercion were found within individuals with intellectual disabilities [27], which was further emphasized by reported encounters with cyber-threats, cyber-harassment, and grooming experiences associated with 22q11 deletion syndrome [26].

3.2.2. Duration and Start of OCSEA

The available information for the onset and duration of the OCSEA experience is limited, as only two studies included relevant information, and these studies were more focused on the associated risk factors of OCSEA [4,19]. Particularly noteworthy is the brief time gap between an abuser initiating online contact and a child responding, which can be as fleeting as a few minutes, emphasizing the rapid and dynamic nature of these types of online interactions [19]. The persistence of grooming over extended periods, sometimes spanning several years before detection, further reveals the insidious nature of OCSEA [4].

3.3. Associated Risk Factors

3.3.1. Lack of Parental Monitoring and Supervision of Online Activities

The parents' awareness of online risks and active supervision of children and adolescents provided by their caregivers and parents can serve as essential protective measures [26]. However, it is crucial to acknowledge that parental awareness of their children's and of adolescents' online relationships may be lacking in some instances and could expose children and adolescents to online risks [4]. Monitoring online activities is especially important for children with disabilities, as parents and caregivers may face challenges in understanding what is happening [29]. The unsupervised use of technology is specifically highlighted as a significant risk factor that demands attention and intervention balanced with the recognition of a children's rights perspective [13].

Furthermore, parents of children and adolescents with disabilities in one study testified that they lacked the knowledge of how to talk to their children and adolescents about OCSEA prevention, and more than 40% of parents who participated in the study thought their children and adolescents were too young to discuss this issue with [30].

3.3.2. Consequences of OCSEA Experienced by the Victims

The repercussions of online victimization extend across various dimensions, leaving victims to grapple with profound challenges, involving their desire to have control of their lives, physical and mental health, and their images, lives, bodies, relationships, and careers when it comes to image-based OCSEA [25]. Additionally, the psychological harm inflicted on victims is a concerning aspect highlighted in multiple studies [19]. Victims with disabilities manifested consequences such as social isolation, withdrawal from social media platforms, and emotional distress [19,21]. It is noteworthy that social isolation emerges as a recurring theme, significantly heightening the vulnerability of individuals to OCSEA, so this could lead to revictimization [18–20,24,25].

3.3.3. Vulnerabilities of the Victims

The studies shed light on additional vulnerabilities that further compound the challenges faced by victims. For example, low self-esteem and difficulties in forming relationships emerge as noteworthy aspects, intensifying the vulnerability of children and adolescents with disabilities to OCSEA [13]. El-Assam, Lane, and Katz conducted a survey with 15,278 participants including individuals who: have a physical illness; cannot see well or at all; cannot hear well or at all; have speech difficulties; have learning difficulties; or have Autism Spectrum Disorder. These participants were from 94 schools and colleges from England, and data suggested that family circumstances, encompassing financial strains, dysfunction, and parental substance misuse, could contribute to this heightened susceptibility [23]. Furthermore, the complexities of addressing issues related to the sexual exploitation of children and adolescents in the online context become apparent when considering societal perceptions that may not universally recognize such exploitation as serious or harmful for children [23,29].

Within diverse contexts, as it was mentioned in one of the studies [24], it can be a challenging issue to identify a behavior as OCSEA or not, and these differing attitudes may pose challenges to carry out an effective intervention. One study about sexual abuse involving children and adolescents evidenced that children with intellectual disabilities

did not always realize they were being abused when experiencing sexual abuse [31]. Thus, future research should aim to explore the specific vulnerabilities and challenges faced by individuals with intellectual disabilities in recognizing and reporting instances of OCSEA. Additionally, a narrative review about sexual abuse involving children with an intellectual disability highlights the unique obstacles faced by children and adolescents with disabilities, pointing out challenges in communication and understanding consent. These difficulties could potentially impact their ability to navigate online situations safely as children and adolescents with disabilities may have more difficulties in understanding the situation due to their specific needs [31].

4. Discussion

The aim of this systematic review was to identify the prevalence, nature, and associated risk factors of OCSEA of children and adolescents with disabilities. In total, 1663 articles were initially identified through extensive searches across 12 databases in both English and Spanish language. Thirteen studies were included in this systematic review, revealing information about the prevalence, nature, and associated risk factors of OCSEA of children and adolescents with disabilities.

Regarding the prevalence of OCSEA, the information retrieved in this systematic review is limited, as only 13 studies were included. A study involving 65 victims with disabilities found that 25% experienced both OCSEA and CSEA, while 75% encountered OCSEA [4]. One of the studies [17] also establishes the need for targeted interventions to protect children and adolescents with mental health issues from OCSEA. Recognizing the diverse vulnerabilities faced by this population [13] is vital, both with regards to their unique mental health aspects and their wellbeing.

Studies examining the nature of OCSEA underscore the diverse nature of perpetrators, indicating that both men and women engage in this behavior, targeting victims of varying ages [4]. In addition, it was identified that abusers in the studies [3,13,19,27] were mainly groomers, sexual predators, cyber-bullies, cyber-stalkers, and sextortionists. In terms of the duration and start of OCSEA, studies suggest that the time gap between an abuser initiating online contact and a child responding can be as brief as a few minutes [19], but the consequences can be permanent [13].

For the associated risk factors, findings suggest that social isolation may contribute to the vulnerability of this population [19]. Family factors were also highlighted, such as financial difficulties, familial dysfunction, and parental substance abuse; these factors could also be some of the contributing factors that could lead to increased vulnerability [23]. Studies also suggested that parents can act as protectors, as they can supervise their child's online activity, preventing OCSEA [24,26]. Therefore, it is essential to enhance the awareness of parents or caregivers regarding the heightened risk of their children and adolescents with diverse disabilities to ensure effective safeguarding [32]. Future research may also explore the dynamics of child–parent communication, especially focusing on how children and adolescents with disabilities disclose their online experiences and challenges with their parents and others. In this sense, there are evidence-based sources that include guidelines to improve this preventive dimension [19]. One of the studies [19] clarifies, step-by-step, how to talk with children and adolescents with disabilities of various ages about the risks on the Internet to prevent OCSEA. These steps include (1) starting the conversation and listening to their concerns; (2) handling difficult questions; (3) avoiding judgement, blame or shame; and/or (4) setting rules about the use of technology, among others.

Additionally, effective programs to prevent OCSEA of children and adolescents with disabilities should be implemented to identify which interventions successfully tackle this issue. Moreover, the development and implementation of comprehensive school-based monitoring and reporting systems and policies should be revised to ensure the identification and reporting of OCSEA cases against children and adolescents with disabilities by children, parents/caregivers, teachers, and community leaders [33].

Within the broader context of online safety for children and adolescents with disabilities, future research should investigate the educational aspect of consent, ensuring that minors possess a nuanced comprehension of consent in the digital realm to improve safeguarding. This entails education on discerning inappropriate behaviors and comprehending the implications of sharing personal information online. A comprehensive approach to online safety structured in a more simplified way is needed so that children and adolescents can understand this issue. Furthermore, future research should investigate the understanding of consent as a form of protecting children and adolescents with disabilities, even when their parents are not with them, so that they can develop skills to navigate the digital landscape responsibly and confidently.

Finally, future research about CSEA should include more specific questions when it comes to OCSEA. For example, a study carried out by Finkelhor, Turner, and Colburn involving 2639 respondents aged 18 to 28 [34] found that when online abuse was added to a survey in which participants were asked about child sexual abuse, the overall prevalence rate of CSA increased from 13.5% to 21.7%. This corresponds to an increase from 19.8% to 31.6% for females and from 6.2% to 10.8% for males [34]. Thus, this variable could be included in future research, specifying if the participant is a person living with disabilities. This could lead to a better comprehension of the prevalence of OCSEA of children and adolescents with disabilities and to find solutions for its prevention.

5. Conclusions

In conclusion, the findings from this systematic review highlight the need to continue investigating the prevalence, nature, and associated risk factors of OCSEA of children and adolescents with disabilities, as the studies retrieved for review were scarce. This emphasizes the need for comprehensive support and intervention measures for prevention due to their vulnerabilities. It also underscores the need to include disaggregated data, such as the number of participants with disabilities or their types of disabilities, in scientific research. This could help us to better understand the prevalence of OCSEA of children and adolescents with disabilities, as there is currently a lack of evidence related to this issue.

Additionally, this research retrieves evidence that reveals social isolation as a potential risk factor of OCSEA victimization for children and adolescents with disabilities. In this sense, a proactive approach is needed to address the critical factors indicating the importance of taking a targeted and tailored approach when addressing OCSEA of children and adolescents with disabilities to ensure the protection and wellbeing of this particularly vulnerable group. In summary, by understanding the prevalence, nature and risk factors of this population, future research can advance its knowledge in this regard to help with the prevention and identification of OCSEA of children and adolescents with disabilities.

This research also emphasizes the need for multifaceted interventions that address not only the explicit risks associated with online victimization but also the consequences and vulnerabilities that shape the experiences of victims with disabilities as well as those that address perpetrators and the online environment. Policymakers, educators, and support organizations should collaborate to implement targeted strategies that enhance the parental awareness of the possible risks in the online sphere, provide comprehensive mental health support, and address the broader societal attitudes contributing to the vulnerability of children and adolescents, particularly those with disabilities, in online spaces. Finally, the onus for prevention should not only lie with children or their families; more work needs to be carried out to keep online environments safe for all children and to hold perpetrators accountable.

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Appendix A

Table A1. Search Strategy in Spanish.

Search Terms	
Context	“abuso sexual en línea” OR “explotación sexual en línea” OR “violencia sexual en línea” OR “explotación y abuso sexual en línea” OR “chantaje sexual en línea” OR “acoso sexual en línea” OR “crimen sexual en línea” OR “sextorsión en línea” OR “imágenes prohibidas” OR “transmisión en vivo” OR “engaño en línea” OR “coacción en línea”
Condition	discapacidad OR discapacidades OR “trastorno del espectro autista” OR autismo OR “discapacidad intelectual” OR “discapacidades de aprendizaje” OR discapacitado OR deterioro OR “discapacidad física” OR “discapacidad visual” OR “ciego” OR “sordo” OR “pérdida auditiva” OR “enfermedad mental” OR “lesión cerebral”
Population	niñ* OR adolescen* OR infant* OR bebé OR bebés OR toddler* OR “persona joven” OR “personas jóvenes” OR juventud OR teen* OR preteen* OR pre-teen* OR “preteen” OR kid* OR prepub* OR pre-pub* OR “pre pub” OR post-pub* OR postpub* OR “post pub” OR pubescen* OR pubert* OR juvenil* OR menor* OR niño* OR niña* OR preescolar*

Table A2. RoB Assessment.

Title	Method Explained	Participants	Comparator	Outcomes: Type of OCSEA	Outcomes: Type of Disability	Outcomes: Measurement of Outcomes	Summary RoB Assessment
Online risk for people with intellectual disabilities [22]	Yes	No	Yes	Yes	Yes	Yes	5
Psychological Distress and Its Mediating Effect on Experiences of Online Risk [23]	Yes	Yes	Yes	No	Yes	Yes	5
Online Grooming as a Manipulative Social Interaction [20]	Yes	No	Yes	Yes	No	No	3
Making Sure Your Home Doesn’t Have an Open Door to Child Sexual Abusers [19]	No	No	Yes	Yes	Yes	No	3
Mapping Real-World to Online Vulnerability in Young People with Developmental Disorders: Illustrations from Autism and Williams Syndrome [17]	No	No	Yes	No	Yes	Yes	3

Table A2. Cont.

Title	Method Explained	Participants	Comparator	Outcomes: Type of OCSEA	Outcomes: Type of Disability	Outcomes: Measurement of Outcomes	Summary RoB Assessment
Cibervíctimas con discapacidad: cuestiones victimológicas y retos forenses [21]	No	No	Yes	Yes	Yes	No	3
A global systematic scoping review of literature on the sexual exploitation of boys [24]	Yes	No	Yes	No	Yes	Yes	4
Cybervictimization of Young People with an Intellectual or Developmental Disability: Risks Specific to Sexual Solicitation [27]	Yes	No	Yes	Yes	Yes	Yes	5
Seeking Justice and Redress for Victim-Survivors of Image-Based Sexual Abuse [25]	Yes	Yes	Yes	Yes	No	Yes	5
Online Grooming: Factores de Riesgo y Modus Operandi a Partir de un Análisis de Sentencias Españolas [4]	Yes	Yes	Yes	Yes	No	Yes	5
Mapping online child safety in Asia and the Pacific [26]	Yes	Yes	Yes	Yes	Yes	Yes	6
Youth Sexual Exploitation on the Internet: DSM-IV Diagnoses and Gender Differences in Co-occurring Mental Health Issues [13]	Yes	No	Yes	Yes	No	Yes	4
The Sexual Exploitation and Abuse of Deaf and Disabled Children Online [18]	No	No	Yes	Yes	Yes	No	3

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