



SEARCHLIGHT 2023

CHILDLIGHT ANNUAL FLAGSHIP REPORT

TECHNICAL NOTES

Project

C

**Nature of Online Child Sexual
Exploitation and Abuse (CSEA)**

Nature of Online Child Sexual Exploitation and Abuse (CSEA)

Technical Note

This scoping review focused on 82 studies. In order to create a comprehensive search strategy, we conducted a series of preliminary searches on several academic databases accessed through EBSCOhost. This initial exploration helped refine our search strategy regarding the relevant terms associated with the prevalence and nature of OCSEA. An extensive search through academic and grey literature, as well as online published reports of specialized organizations, utilized systematic queries was conducted.

This process involved the use of four distinct sets of term, related to:

Age group (e.g., “children”, “minors”, “teens”)

Offense type (e.g., “CSEA”, “grooming”, “CSAM”)

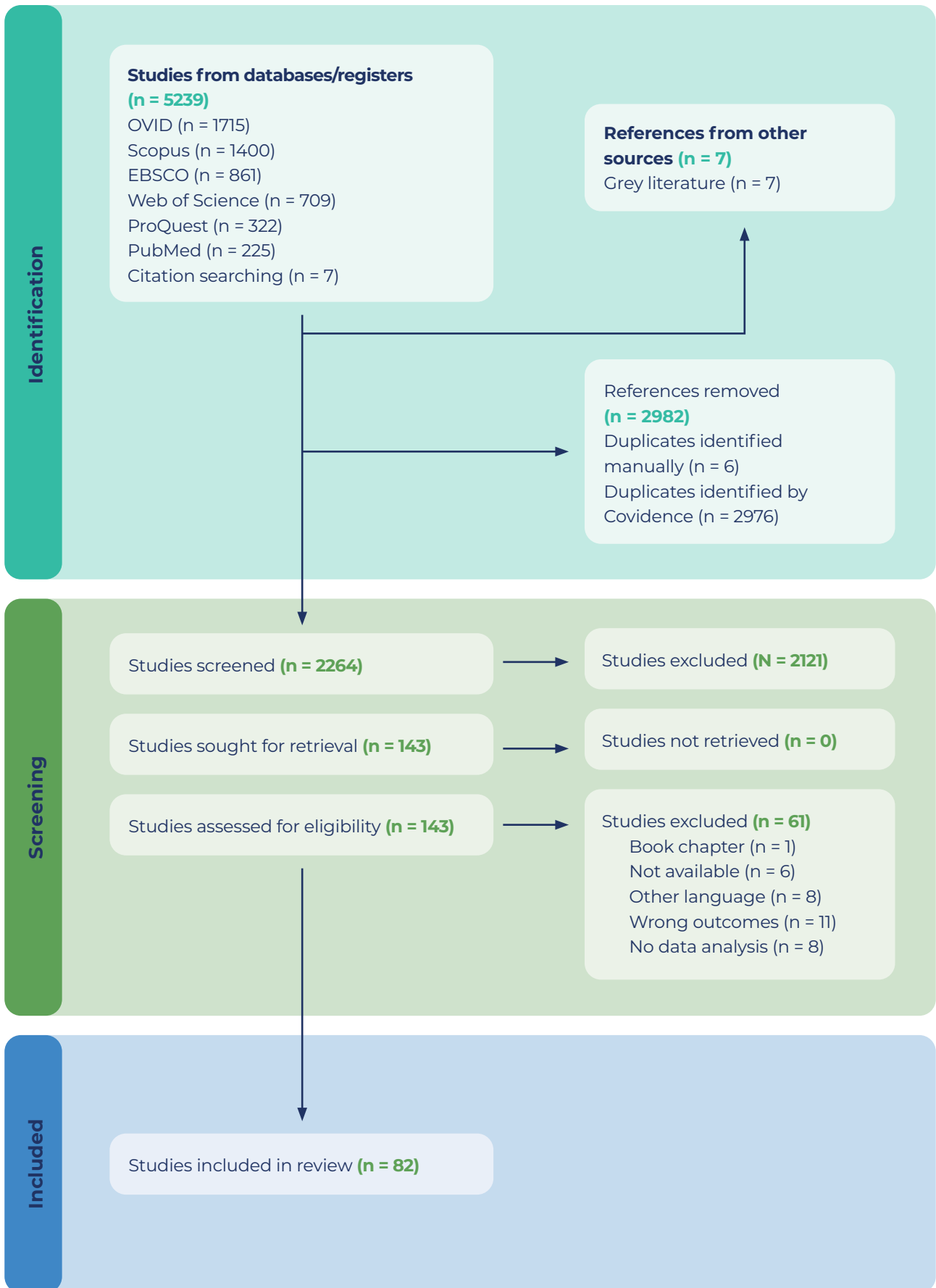
Magnitude and measurement (e.g., “percentage”, “rate”, “incidence”, “prevalence”)

Digital networks (e.g., “ESP”, “electronic service provider”, “P2P”, “dark net”, “darkweb”, “tor”, “I2P”)

Given the potentially exclusionary nature of certain combinations of search terms within a query, Boolean logic was used – combining AND OR operators – to ensure a more inclusive and comprehensive search.

The relevant sources were compiled in Covidence and subjected to Title and Abstract screening, Full-Text screening and Data Extraction. See below for the PRISMA flow diagram found in Table I.

Prisma Flow Diagram of Scoping Review



A total of 75 number of studies were included and seven documents obtained from Non-Governmental Organizations and Research Institutes for a total of 82 studies, of these:

- 41 focused on various types sexual harms to children online (Alderson et al., 2021; Augusti et al., 2021; Baker, 2022; Bergen et al., 2014; Calvete, 2022; Canders et al., 2013; Copp et al., 2013; Dahlqvist et al., 2018, 2022; de Santisteban & Gamez-Guadix, 2017, 2018; Diaz-Aguado & Martinez-Arias, 2022; Finkelhor et al., 2022, 2023, 2023; Gamez-Guadix et al., 2018; Garrington et al, 2017; Gilbert et al., 2023; Greene-Colozzi et al., 2020; Guerra et al., 2021; Kerstens & Sol, 2014; Kolodner, 2021; Longobardi et al., 2021; Madigan et al., 2018; Mitchell et al., 2013, 2014; Moore et al 2020; Noll et al 2022; Ortega-Baron et al., 2022; Pederson et al., 2023; Rowse et al., 2022; Say et al., 2015; Schulz et al., 2016; Sklenarova et al., 2018; Tintori et al., 2023; Uytun et al., 2019; Vale et al., 2018; Villacampa & Gomez, 2017; Widuger 2016; Zelviene et al., 2020; Zweig et al., 2013),
- 17 focused on child sexual abuse material file sharing networks (Bissias et al., 2015; Bursztein et al., 2019; Cubitt et al., 2021; Elliot et al., 2019; Faust et al., 2015; Hernandez et al., 2018; Hurley et al., 2013; Jung et al., 2012; Levine et al., 2017, 2023; Owens et al., 2016; Phelan, 2022; Schuler et al., 2021; Smid et al., 2014; Steel et al., 2021; Van der Bruggen & Blokland, 2022; Van der Bruggen et al., 2022) and
- 12 focused on 'sexting' and 'sexual extortion' (Alsoubai et al., 2022; Calvete et al., 2021, 2023; Ceron et al., 2018; Foody et al., 2021; de Santisteban & Gamez-Guadix, 2017; Gamez-Guadiz & Incera, 2021; Gamez-Guadiz et al., 2022; Machimbarrena et al., 2018; Patchin & Hinduja, 2018; Van Ouytsel et al., 2021; Wolak et al., 2018).

More studies focused on victimisation rather than on perpetration with the breakdown as follows:

- 52 of the documents focused on data stemming from victims/students (Augusti et al., 2021; Alderson et al., 2021; Alsoubai et al., 2022; Calvete, 2022; Calvete et al., 2021, 2023; Canders et al., 2013; Copp et al., 2013; Ceron et al., 2018; Dahlqvist et al., 2018, 2022; Diaz-Aguado & Martinez-Arias, 2022; ECPAC, Interpol, 2018; -, Finkelhor et al., 2022, 2023, 2023; Foody et al., 2021; Gamez-Guadix et al., 2018; Gamez-Guadix & Incera., 2021, Gamez-Guadix, 2022; Gandolfi et al., 2021; Gewirtz-Meydan et al., 2019; Gilbert et al., 2023; Greene-Colozzi et al., 2020; Guerra et al., 2021; Hurley et al., 2013; INHOPE, 2022; IWF, 2022; Kerstens & Sol, 2014; Kolodner 2021; Longobardi et al., 2021; Machimbarrena et al., 2018; Madigan et al., 2018; Madigan et al., 2018; Mitchell et al., 2013, 2014; Moore et al 2020; Noll et al 2022; Ortega-Baron et al., 2022; Patchin & Hinduja, 2018; Pederson, et al., 2023 Rowse et al., 2022; Say et al., 2015; Sklenarova et al., 2018; Tintori et al., 2023; Uytun et al., 2019; Van Ouytsel et al., 2021; Villacampa & Gomez 2017; WeProtect Global Alliance, 2021, 2023; Widuger, 2016; Wolak et al., 2018; Zelviene et al., 2020).
- while 18 focused solely on perpetrator data (Bergen et al., 2014; Canadian Centre for Child Protection, 2021; Cubitt et al., 2022; Elliot et al., 2019; Faust et al., 2015; Garrington et al., 2017; Hernandez et al., 2018; Jung et al., 2012; Lamade, 2014; Kolodner, 2021; Owens et al., 2016; Phelan, 2022; Schuler et al., 2021; Schulz et al., 2016; Smid et al., 2014; Steel et al., 2021; Vale et al., 2018; Van der Bruggen & Blokland, 2022; Van der Bruggen et al., 2022;).
- In addition, three studies looked at both victimisation and perpetration (Canders et al., 2013; Vale et al., 2018; Zweig et al., 2018)

Strengths and Limitations

Limitations of this study include the search only being conducted in English, which may miss important non-English studies and the search for studies was from 15 June 2013 – 15 June 2023 which may preclude the most recently published studies. Therefore, it is impossible to tell if the top harms identified are simply those most studied or represent the top harms universally. However, the agreement between studies of various methodological approaches limits this potential bias. Additionally, we mainly focused on the empirical studies and reports providing primary and secondary quantitative data and analysis on the topic. Future studies might also investigate qualitative research on child sexual abuse and exploitation for a better understanding of individual and contextual factors contributing to online victimisation. The review focussed on the perspectives of victims, survivors and perpetrators and may have missed studies which involved data from parents/guardians, care-providers and front-line workers. This review also did not include research investigating psychometric properties of measures used for examining the online child sexual abuse and exploitation, which could provide more insight into the dynamics of children and the online environment.

Despite these limitations, this scoping review provided a comprehensive synthesis of a variety of available quantitative data sources, including published peer-reviewed studies, grey literature and online published digital network monitoring reports and statistics. We used several academic search platforms and databases, as well as conducted hand searches of references of prior reviews and eligible studies, and expert recommendations, to ensure as far as possible that all relevant data sources are included. Moreover, the scope of this review was not restricted by the

type of research context or specific OCSEA characteristics, which allowed us to appraise a diverse range of OCEA typologies and summarise evidence from both victim- and perpetrator-centric investigations.

Technical note references

See below for included studies in the review.

Alderson, K., Ireland, C. A., Khan, R., Ireland, J. L., & Lewis, M. (2022). Child sexual exploitation, poly-victimisation and resilience. *Journal of Criminological Research, Policy and Practice*, 8(1), 53-74. <https://doi.org/10.1108/JCRPP-04-2021-0017>

Alsoubai, A., Song, J., Razi, A., Naher, N., De Choudhury, M., & Wisniewski, P. J. (2022). From 'Friends with Benefits' to 'Sextortion': A Nuanced Investigation of Adolescents' Online Sexual Risk Experiences. *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2). <https://doi.org/10.1145/3555136>

Augusti, E.-M., Sætren, S. S., & Hafstad, G. S. (2021). Violence and abuse experiences and associated risk factors during the COVID-19 outbreak in a population-based sample of Norwegian adolescents. *Child Abuse & Neglect*, 118, 105156. <https://doi.org/10.1016/j.chiabu.2021.105156>

Baker, I. (2023). Blackmail on the internet: An exploration of the online sexual coercion of children. Dissertation Abstracts International Section A: *Humanities and Social Sciences*, 84(9-A). PhD, Nottingham Trent University. <https://irep.ntu.ac.uk/id/eprint/47682/>

Bergen, E., Davidson, J., Schulz, A., Schuhmann, P., Johansson, A., Santtila, P., & Jern, P. (2014). The Effects of Using Identity Deception and Suggesting Secrecy on the Outcomes of Adult-Adult and Adult-Child or -Adolescent Online Sexual Interactions. *Victims and Offenders*, 9(3), 276-298. <https://doi.org/10.1080/15564886.2013.873750>

- Bissias, G., Levine, B., Liberatore, M., Lynn, B., Moore, J., Wallach, H., & Wolak, J. (2015). Characterization of contact offenders and child exploitation material trafficking on five peer-to-peer networks. *Child Abuse and Neglect*, 52, 185-199. <https://doi.org/10.1016/j.chiabu.2015.10.022>
- Bursztein, E., DeLaune, M., Olson, L., Bright, T., Eliff, D. M., Shehan, J., Thomas, K., Clarke, E., Hsu, N., & Thakur, M. (2019). Rethinking the detection of child sexual abuse imagery on the internet. *The World Wide Web Conference*.
- Calvete, E., Fernández-González, L., & Orue, I. (2023). A Growth Mindset and Self-Affirmation Intervention to Reduce Violent and Risky Online Behaviors: The Moderating Role of Previous Victimization. *Journal of Interpersonal Violence*, 38(7-8), 5875-5901. <https://doi.org/10.1177/08862605221127221>
- Calvete, E., Fernández-González, L., Royuela-Colomer, E., Morea, A., Larrucea-Iruretagoyena, M., Machimbarrena, J. M., González-Cabrera, J., & Orue, I. (2021). Moderating factors of the association between being sexually solicited by adults and active online sexual behaviors in adolescents. *Computers in Human Behavior*, 124. <https://doi.org/10.1016/j.chb.2021.106935>
- Calvete, E., Orue, I., & Gámez-Guadi, M. (2022). A Preventive Intervention to Reduce Risk of Online Grooming Among Adolescents. *Intervencion psicosocial*, 31(3), 177-184. <https://doi.org/10.5093/pi2022a14>
- Canadian Centre for Child Protection (2021). Project Arachnid: Online availability of child sexual abuse material. Accessed from: Resources & Research: Project Arachnid: Online availability of child sexual abuse material – protectchildren.ca
- Canders, C. P., Merchant, R. C., Pleet, K., & Fuerch, J. H. (2013). Internet-Initiated Sexual Assault Among U.S. Adolescents Reported in Newspapers, 1996–2007. *Journal of Child Sexual Abuse*, 22(8), 987-999. <https://doi.org/10.1080/10538712.2013.839593>
- Cerón, M.A., Eisman, L.B., & Palomares, F.F. (2018). Grooming, Cyberbullying and Sexting in Chile according of sex and school management or administrative dependency. *Revista chilena de pediatria*, 89(3), 352-360. <https://doi.org/10.4067/S0370-41062018005000201>
- Copp, J. E., Mumford, E. A., & Taylor, B. G. (2021). Online sexual harassment and cyberbullying in a nationally representative sample of teens: Prevalence, predictors, and consequences. *Journal of Adolescence*, 93, 202-211. <https://doi.org/10.1016/j.adolescence.2021.10.003>
- Cubitt, T. I. C., Napier, S., & Brown, R. (2023). Understanding the Offline Criminal Behavior of Individuals Who Live Stream Child Sexual Abuse. *Journal of Interpersonal Violence*, 38(9/10), 6624-6649. <https://doi.org/10.1177/08862605221137712>
- Dahlqvist, H., Svensson, Å., & Gillander Gådin, K. (2022). Co-occurrence of online and offline bullying and sexual harassment among youth in Sweden: Implications for studies on victimization and health a short communication. *International journal of circumpolar health*, 81(1), 2130362. <https://doi.org/10.1080/22423982.2022.2130362>
- Dahlqvist, H. Z., & Gådin, K. G. (2018). Online sexual victimization in youth: predictors and cross-sectional associations with depressive symptoms. *European Journal of Public Health*, 28(6), 1018-1023. <https://doi.org/10.1093/eurpub/cky102>

- De Santisteban, P., & Gámez-Guadix, M. (2018). Longitudinal and reciprocal relationships of depression among minors with online sexual solicitations and interactions with adults. *Cyberpsychology, Behavior, and Social Networking*, 21(6), 355-360. <https://doi.org/10.1089/cyber.2017.0641>
- De Santisteban, P., & Gámez-Guadix, M. (2018). Prevalence and Risk Factors Among Minors for Online Sexual Solicitations and Interactions With Adults. *Journal of Sex Research*, 55(7), 939-950. <https://doi.org/10.1080/00224499.2017.1386763>
- Díaz-Aguado, M. J., & Martínez-Arias, R. (2022). Types of Male Adolescent Violence Against Women in Three Contexts: Dating Violence Offline, Dating Violence Online, and Sexual Harassment Online Outside a Relationship. *Frontiers in psychology*, 13, 850897. <https://doi.org/10.3389/fpsyg.2022.850897>
- Díaz-Aguado, M. J., Martínez-Arias, R., & Falcón, L. (2022). Typology of Victimization against Women on Adolescent Girls in Three Contexts: Dating Offline, Dating Online, and Sexual Harassment Online. *International journal of environmental research and public health*, 19(18). <https://doi.org/10.3390/ijerph191811774>
- ECPAT, INTERPOL, (2018). Towards a global indicator on unidentified victims in child sexual exploitation material. A technical report. *ECPAT International*. Accessed from: <https://ecpat.org/resource/technical-report-towards-a-global-indicator-on-unidentified-victims-in-child-sexual-exploitation-material/>
- Elliott, I. A., Mandeville-Norden, R., Rakestrow-Dickens, J., & Beech, A. R. (2019). Reoffending rates in a U.K. community sample of individuals with convictions for indecent images of children. *Law and human behavior*, 43(4), 369-382. <https://doi.org/10.1037/lhb0000328>
- Faust, E., Bickart, W., Renaud, C., & Camp, S. (2014). Child Pornography Possessors and Child Contact Sex Offenders: A Multilevel Comparison of Demographic Characteristics and Rates of Recidivism. *Sex Abuse*, 27(5), 460-478. <https://doi.org/10.1177/1079063214521469>
- Finkelhor, D., Turner, H., & Colburn, D. (2022). Prevalence of Online Sexual Offenses Against Children in the US. *JAMA Network Open*, 5(10), e2234471-e2234471. <https://doi.org/10.1001/jamanetworkopen.2022.34471>
- Finkelhor, D., Turner, H., & Colburn, D. (2023). Which dynamics make online child sexual abuse and cyberstalking more emotionally impactful: Perpetrator identity and images? *Child Abuse & Neglect*, 137, 106020. <https://doi.org/10.1016/j.chiabu.2023.106020>
- Finkelhor, D., Turner, H., Colburn, D., Mitchell, K., & Mathews, B. (2023). Child sexual abuse images and youth produced images: The varieties of Image-based Sexual Exploitation and Abuse of Children. *Child Abuse & Neglect*, 143, 106269. <https://doi.org/10.1016/j.chiabu.2023.106269>
- Foody, M., Mazzone, A., Laffan, D. A., Loftsson, M., & O'Higgins Norman, J. (2021). "It's not just sexy pics": An investigation into sexting behaviour and behavioural problems in adolescents. *Computers in Human Behavior*, 117, N.PAG-N.PAG. <https://doi.org/10.1016/j.chb.2020.106662>
- Gámez-Guadix, M., Almendros, C., Calvete, E., & De Santisteban, P. (2017). Persuasion strategies and sexual solicitations and interactions in onlinesexual grooming of adolescents: Modeling direct and indirect pathways. *Journal of Adolescence*, 63, 11-18. <https://doi.org/10.1016/j.adolescence.2017.12.002>

- Gámez-Guadix, M., & Incera, D. (2021). Homophobia is online: Sexual victimization and risks on the internet and mental health among bisexual, homosexual, pansexual, asexual, and queer adolescents. *Computers in Human Behavior, 119*, 106728. <https://doi.org/10.1016/j.chb.2021.106728>
- Gámez-Guadix, M., Mateos-Pérez, E., Wachs, S., Wright, M., Martínez, J., Incera, D., Gámez-Guadix, M., & Mateos-Pérez, E. (2022). Assessing image-based sexual abuse: Measurement, prevalence, and temporal stability of sextortion and nonconsensual sexting ("revenge porn") among adolescents. *Journal of Adolescence, 94*(5), 789-799. <https://doi.org/10.1002/jad.12064>
- Gandolfi, C. E., Mosillo, M., Del Castillo, G., Forni, G., Pietronigro, A., Tiwana, N., & Pellai, A. (2021). Online grooming: an analysis of the phenomenon. *Minerva pediatrica, 73*(3), 272-280. <https://doi.org/10.23736/S2724-5276.20.05615-7>
- Garrington, C., Rickwood, D., Chamberlain, P., & P. Boer, D. (2018). A systematic review of risk variables for child abuse material offenders. *Journal of Forensic Practice, 20*(2), 91-101. <https://doi.org/10.1108/JFP-05-2017-0013>
- Gewirtz-Meydan, A., Lahav, Y., Walsh, W., & Finkelhor, D. (2019). Psychopathology among adult survivors of child pornography. *Child Abuse & Neglect, 98*, 104189. <https://doi.org/10.1016/j.chiabu.2019.104189>
- Gilbert, M., Fernet, M., Hebert, M., & Couture, S. (2023). Diversity of Profiles and Coping Among Adolescent Girl Victims of Sexual Dating Violence. *Journal of Child Sexual Abuse, 32*(5), 596-614. <https://doi.org/10.1080/10538712.2023.2195856>
- Greene-Colozzi, E. A., Winters, G. M., Blasko, B., & Jeglic, E. L. (2020). Experiences and Perceptions of Online Sexual Solicitation and Grooming of Minors: A Retrospective Report. *Journal of Child Sexual Abuse, 29*(7), 836-854. <https://doi.org/10.1080/10538712.2020.1801938>
- Guerra, C., Pinto-Cortez, C., Toro, E., Efthymiadou, E., & Quayle, E. (2021). Online sexual harassment and depression in Chilean adolescents: Variations based on gender and age of the offenders. *Child Abuse & Neglect, 120*, 105219. <https://doi.org/10.1016/j.chiabu.2021.105219>
- Hernandez, S. C. L. S., Lacsina, A. C., Ylade, M. C., Aldaba, J., Lam, H. Y., Estacio, L. R., & Lopez, A. L. (2018). Sexual exploitation and abuse of children online in the Philippines: A review of online news and articles. *Acta Medica Philippina, 52*(4), 305-311. <https://doi.org/10.47895/amp.v52i4.352>
- Hurley, R., Prusty, S., Soroush, H., Walls, R. J., Albrecht, J., Cecchet, E., Levine, B. N., Liberatore, M., Lynn, B., & Wolak, J. (2013). Measurement and analysis of child pornography trafficking on p2p networks. In *Proceedings of the 22nd international conference on World Wide Web* (pp. 631-642).
- INHOPE (2022). Annual Report 2022. Accessed from: [INHOPE | INHOPE Annual Report 2022](https://www.inhope.org/)
- Internet Watch Foundation (2022). #BehindTheScreens. A deep dive into the digital and social emergency happening #BehindTheScreens, in children's bedrooms. Annual report 2022. Accessed from: [Internet Watch Foundation \(IWF\) Annual Report 2022](https://www.internetwatchfoundation.org/)
- Jung, S., Ennis, L., Stein, S., Choy, A. L., & Hook, T. (2013). Child pornography possessors: Comparisons and contrasts with contact- and non-contact sex offenders. *Journal of Sexual Aggression, 19*(3), 295-310. <https://doi.org/10.1080/13552600.2012.741267>
- Kerstens, J., & Stol, W. (2014). Receiving online sexual requests and producing online sexual images: The multifaceted and dialogic nature of adolescents' online sexual interactions. *Cyberpsychology, 8*(1). <https://doi.org/10.5817/CP2014-1-8>

- Kolodner, H. (2021). A Study of Recidivism among Online Sexual Predators. *International Social Science Review (Online)*, 97(2), 1-17. <https://issr.ung.edu/articles/101>
- Lamade, R. V. (2016). Development of subtypes of internet and contact sexual offenders who perpetrate against children. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 76(7-B(E)).
- Levine, B. N., Liberatore, M., Lynn, B., & Wright, M. (2017). Statistical detection of downloaders in freenet. *IWPE@SP* (2017).
- Levine, B. N., Liberatore, M., Lynn, B., & Wright, M. (2020). A Forensically Sound Method of Identifying Downloaders and Uploaders in Freenet. *Proceedings of the 2020 ACM SIGSAC Conference on Computer and Communications Security*. <https://doi.org/10.1145/3372297.3417876>
- Longobardi, C., Fabris, M. A., Prino, L. E., & Settanni, M. (2021). Online sexual victimization among middle school students: Prevalence and association with online risk behaviors. *International Journal of Developmental Science*, 15(1-2), 39-46. <https://doi.org/10.3233/DEV-200300>
- Machimbarrena, J. M., Calvete, E., Fernández-González, L., Álvarez-Bardón, A., Álvarez-Fernández, L., & González-Cabrera, J. (2018). Internet Risks: An Overview of Victimization in Cyberbullying, CyberDating Abuse, Sexting, Online Grooming and Problematic Internet Use. *International of Environmental Research and Public Health*, 15(11). <https://doi.org/103390/ijerph15112471>
- Madigan, S., Villani, V., Azzopardi, C., Laut, D., Smith, T., Temple, J. R., Browne, D., & Dimitropoulos, G. (2018). The Prevalence of Unwanted Online Sexual Exposure and Solicitation Among Youth: A Meta-Analysis. *Journal of Adolescent Health*, 63(2), 133-141. <https://doi.org/10.1016/j.jadohealth.2018.03.012>
- Marret, M. J., & Wan-Yuen, C. (2018). Victimization After Meeting With Online Acquaintances: A Cross-Sectional Survey of Adolescents in Malaysia. *Journal of Interpersonal Violence*, 33(15), 2352-2378. <https://doi.org/10.1177/0886260515625502>
- Mitchell, K., & Štulhofer, A. (2021). Online sexual harassment and negative mood in Croatian female adolescents. *European Child and Adolescent Psychiatry*, 30(2), 225-231. <https://doi.org/10.1007/s00787-020-01506-7>
- Mitchell, K. J., Jones, L. M., Finkelhor, D., & Wolak, J. (2013). Understanding the decline in unwanted online sexual solicitations for U.S. youth 2000-2010: Findings from three Youth Internet Safety Surveys. *Child Abuse and Neglect*, 37(12), 1225-1236. <https://doi.org/10.1016/j.chiabu.2013.07.002>
- Mitchell, K. J., Ybarra, M. L., & Korchmaros, J. D. (2014). Sexual harassment among adolescents of different sexual orientations and gender identities. *Child Abuse & Neglect*, 38(2), 280-295.
- Montiel, I., Carbonell, E., & Pereda, N. (2015). Multiple online victimization of Spanish adolescents: Results from a community sample. *Child Abuse Negl*, 52, 123-134. <https://doi.org/10.1016/j.chiabu.2015.12.005>
- Moore, J. L., Houck, C., Hirway, P., Barron, C. E., & Goldberg, A. P. (2017). Trafficking Experiences and Psychosocial Features of Domestic Minor SexTrafficking Victims. *Journal of Interpersonal Violence*, 35(15-16), 3148-3163. <https://doi.org/10.1177/0886260517703373>
- Noll, J. G., Haag, A.-C., Shenk, C. E., Wright, M. F., Barnes, J. E., Kohram, M., Malgaroli, M., Foley, D. J., Kouril, M., & Bonanno, G. A. (2022). An observational study of Internet behaviours for adolescent females following sexual abuse. *Nature Human Behaviour*, 6(1), 74-87. <https://doi.org/10.1038/s41562-021-01187-5>

- Ortega-Barón, J., Machimbarrena, J. M., Calvete, E., Orue, I., Pereda, N., & González-Cabrera, J. (2022). Epidemiology of online sexual solicitation and interaction of minors with adults: A longitudinal study. *Child Abuse and Neglect*, 131. <https://doi.org/10.1016/j.chiabu.2022.105759>
- Owens, J. N., Eakin, J. D., Hoffer, T., Muirhead, Y., & Shelton, J. L. E. (2016). Investigative aspects of crossover offending from a sample of FBI online child sexual exploitation cases. *Aggression & Violent Behavior*, 30, 3-14. <https://doi.org/10.1016/j.avb.2016.07.001>
- Patchin, J. W., & Hinduja, S. (2020). Sextortion Among Adolescents: Results From a National Survey of U.S. Youth. *Sexual Abuse: Journal of Research and Treatment*, 32(1), 30-54. <https://doi.org/10.1177/1079063218800469>
- Pedersen, W., Bakken, A., Stefansen, K., & von Soest, T. (2023). Sexual Victimization in the Digital Age: A Population-Based Study of Physical and Image-Based Sexual Abuse Among Adolescents. *Archives of sexual behavior*, 52(1), 399-410. <https://doi.org/10.1007/s10508-021-02200-8>
- Phelan, M. (2022). Crime & justice research 2022: Online sexual exploitation of children. Special reports. Canberra: *Australian Institute of Criminology*. <https://doi.org/10.52922/sp78658>
- Rowse, J., Mullane, S., Bassed, R., & Tully, J. (2022). Technology-facilitated sexual assault in children and adolescents; is there a cause for concern? Fourteen years of experience at a metropolitan forensic paediatric medical service. *Journal of paediatrics and child health*, 58(3), 409-414. <https://doi.org/10.1111/jpc.15724>
- Say, G. N., Babadağı, Z., Karabekiroğlu, K., Yüce, M., & Akbaş, S. (2015). Abuse Characteristics and Psychiatric Consequences Associated with Online Sexual Abuse. *CyberPsychology, Behavior & Social Networking*, 18(6), 333-336. <https://doi.org/10.1089/cyber.2014.0494>
- Schuler, M., Gieseler, H., Schweder, K. W., Von Heyden, M., & Beier, K. M. (2021). Characteristics of the users of troubled desire, a web-based self-management app for individuals with sexual interest in children: Descriptive analysis of self-assessment data. *JMIR Mental Health*, 8(2). <https://doi.org/10.2196/22277>
- Schulz, A., Bergen, E., Schuhmann, P., Hoyer, J., & Santtila, P. (2016). Online sexual solicitation of minors: How often and between whom does it occur? *Journal of Research in Crime and Delinquency*, 53(2), 165-188. <https://doi.org/https://dx.doi.org/10.1177/0022427815599426>
- Sklenarova, H., Schulz, A., Schuhmann, P., Osterheider, M., & Neutze, J. (2018). Online sexual solicitation by adults and peers – Results from a population based German sample. *Child Abuse and Neglect*, 76, 225-236. <https://doi.org/10.1016/j.chiabu.2017.11.005>
- Smid, W., Schepers, K., Kamphuis, J. H., van Linden, S., & Bartling, S. (2014). Prioritizing Child Pornography Notifications: Predicting DirectVictimization. *Sex Abuse*, 27(4), 398-413. <https://doi.org/10.1177/1079063213514453>
- Steel, C. M. S., Newman, E., O'Rourke, S., & Quayle, E. (2021). Collecting and viewing behaviors of child sexual exploitation material offenders. *Child Abuse & Neglect*, 118, 105133. <https://doi.org/10.1016/j.chiabu.2021.105133>
- Tintori, A., Ciancimino, G., Bombelli, I., De Rocchi, D., & Cerbara, L. (2023). Children's Online Safety: Predictive Factors of Cyberbullying and Online Grooming Involvement. *Societies (2075-4698)*, 13(2), 47. <https://doi.org/10.3390/soc13020047>
- Uytun, M. C., Ozmen, S., & Demirci, E. (2019). Assessment of cyber abuse in sexually abused children and adolescents. *European Research Journal*, 5(1), 58-67. <https://doi.org/0.18621/eurj.392361>

- Vale, A., Pereira, F., Gonçalves, M., & Matos, M. (2018). Cyber-aggression in adolescence and internet parenting styles: A study with victims, perpetrators and victim-perpetrators. *Children & Youth Services Review*, 93, 88-99. <https://doi.org/10.1016/j.childyouth.2018.06.021>
- Van der Bruggen, M., & Blokland, A. (2022). Profiling Darkweb Child Sexual Exploitation Material Forum Members Using Longitudinal Posting History Data. *Social Science Computer Review*, 40(4), 865-891. <https://doi.org/https://doi.org/10.1177/0894439321994894>
- Van der Bruggen, M., van Balen, I., van Bunningen, A., Talens, P., Owens, J. N., & Clapp, K. (2022). Even “lurkers” download: The behavior and illegal activities of members on a child sexual exploitation TOR hidden service. *Aggression & Violent Behavior*, 67, 101793. <https://doi.org/10.1016/j.avb.2022.101793>
- Van Ouytsel, J., Lu, Y., & Temple, J. R. (2021). An exploratory study of online early sexual initiation through pressured and unwanted sexting. *Journal of Sex Research*(Bell, D. L., & Garbers, S. (2019). Early sexual initiation among boys: What should we do? *JAMA Pediatrics*, 173 (6), 522- 523. <https://doi.org/10.1080/00224499.2021.1963650>
- Villacampa, C., & Gomez, M. J. (2017). Online child sexual grooming: Empirical findings on victimisation and perspectives on legal requirements. *International Review of Victimology*, 23(2), 105-121. <https://doi.org/https://dx.doi.org/10.1177/0269758016682585>
- WeProtect Global, Alliance (2021). Estimates of childhood exposure to online sexual harms and their risk factors: a global study of childhood experiences of 18 to 20 years olds. *Economist Global Impact Survey*. Accessed from: <https://www.weprotect.org/economist-impact-global-survey/>
- WeProtect Global, Alliance (2023). Global Threat Assessment 2023: Assessing the scale and scope of child sexual exploitation and abuse online, to transform the response. Accessed from: <https://www.weprotect.org/global-threat-assessment-23/#full-report>
- Widuger, C. (2016). Youth populations with an abuse history and their exposure to sexual materials online. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 77(1-B(E)).
- Wolak, J., Finkelhor, D., Walsh, W., & Treitman, L. (2018). Sextortion of Minors: Characteristics and Dynamics. *Journal of Adolescent Health*, 62(1), 72-79. <https://doi.org/10.1016/j.jadohealth.2017.08.014>
- Zelviene, P., Daniunaite, I., Hafstad, G. S., Thoresen, S., Truskauskaite-Kuneviciene, I., & Kazlauskas, E. (2020). Patterns of abuse and effects on psychosocial functioning in Lithuanian adolescents: A latent class analysis approach. *Child Abuse & Neglect*, 108, 104684. <https://doi.org/10.1016/j.chiabu.2020.104684>
- Zweig, J. M., Dank, M., Yahner, J., & Lachman, P. (2013). The Rate of Cyber Dating Abuse Among Teens and How It Relates to Other Forms of Teen Dating Violence. *Journal of Youth and Adolescence*, 42(7), 1063-1077. <https://doi.org/10.1007/s10964-013-9922-8>



supported by

**HUMAN
DIGNITY
FOUNDATION**



THE UNIVERSITY
of EDINBURGH