



Online sexual exploitation of children in the Philippines: A scoping review

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ABSTRACT

Online Sexual Exploitation of Children (OSEC) is a rising form of child abuse in the Philippines with significant social, health and wellbeing consequences for survivors. In response, this scoping review was undertaken to advance understanding of the current empirical evidence on OSEC in the Philippines and to identify its characteristics, key drivers and leading intervention and prevention approaches in order to develop improved policy and practice responses. The authors undertook systematic and manual searches of international academic databases and websites to identify empirical peer reviewed research and grey literature studies conducted from 2005 onwards that investigate OSEC in the Philippines. The search located 121 records, of which 19 met all inclusion criteria. The studies identified provide insights into the dominant forms of OSEC and the characteristics of demand-side offenders and survivors, as well as the specific mediums of exploitation and contexts in which OSEC takes place. Key risk factors for OSEC in the Philippines include the vulnerabilities arising from poverty and weak social protection, limited overall understanding of the harms of OSEC, as well as facilitative technology, social media and financial transaction systems. The findings outline that existing evidence on OSEC is insufficient and recommends further research into OSEC prevalence, the socio-cultural contexts that facilitate OSEC, and establishing the efficacy of intervention approaches, suggesting policy responses focus on community-based child safety initiatives.

1. Introduction

Child Sexual Abuse (CSA), in all its forms, is a widespread problem with a range of detrimental impacts on individuals and communities (Pinheiro, 2006; Stoltenborgh, et al., 2011). One form of CSA is Online Sexual Exploitation of Children, also known as Online Child Sexual Exploitation (OCSE), understood in this study as ‘the production, for the purpose of online publication or transmission, of visual depictions (e.g., photos, videos, live streaming) of the sexual abuse or exploitation of a minor for a third party who is not in the physical presence of the child, in exchange for compensation’ (IJM, 2020a, 4). In the South-east Asian nation of the Philippines, like many other countries, OSEC remains under-researched while at the same time, its rapid proliferation has seen sharp increases in risk to the safety and wellbeing of children, placing extreme pressure on child protection and criminal justice responses (IJM, 2020a; Merten, 2020). The COVID-19 pandemic has created a range of further vulnerabilities for children in the Philippines, which has seen internationally based perpetrators increase their utilisation of

online mediums during public health lockdowns and limited international travel while additional economic hardships are motivating both perpetrators and victims (Merten, 2020; Gill, 2021).

1.1. Online sexual exploitation of children in the Philippines

According to global law enforcement agencies, non-government organisations (NGOs) and researchers, the Philippines is a global hotspot for OSEC (AUSTRAC, 2019; ECPAT International, 2017; EFC, 2015; Europol, 2019; Puffer et al., 2014). Significant numbers of children are estimated to be exploited by OSEC, with these numbers increasing rapidly, despite updated legislation in the last few years in the Philippines, including the anti-trafficking in Persons Act, Cybercrime Prevention Act, and the anti-Child Pornography Law (Glarino & Davis, 2017). A sharp increase in reports of possible OSEC in the Philippines has been recorded by The National Center for Missing and Exploited Children’s (NCMEC), increasing from 1,339,597 in 2020 to 3,188,793 in 2021, the second highest in the world behind India (NCMEC, 2022), an

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increase the Philippines' Department of Justice largely attributes to the Covid-19 pandemic (Pulta, 2020). A study by International Justice Mission (IJM) (2020a) identified a rapid increase of OSEC, specifically all types of internet-based child sexual exploitation in the Philippines, increasing from 43 of every 10,000 internet protocol addresses used for OSEC purposes in 2014, to 149 in every 10,000 in 2017.

The emergence of OSEC, particularly in low and middle-income country contexts such as the Philippines, is consistently attributed to determinants and vulnerabilities relating to poverty, English language proficiency, broad access to information and communications technology, as well as highly established international remittance services that facilitate payments (Batha, 2016; ECPAT International, 2017; Puffer et al., 2014; IJM, 2020a). Six years ago, close to half of the 44 million internet users in the Philippines were under the age of 17 (UNICEF, 2016), (a number expected to be much higher in 2022). OSEC typically involves adults exploiting children with the trafficker or facilitator usually a parent or immediate family member, while some children also produce and sell such content on their own (Internet Watch Foundation, 2018; Merten, 2020; Plan International, 2018), motivated by financial need, to purchase desirable goods, or to develop an online relationship with a foreigner (Terre Des Hommes, 2013b).

A variety of actors are typically involved in the production, distribution, collection of child sexual abuse images or video and finally viewing and engagement with the material (Martin & Slane, 2015). It is important to note that OSEC intersects with other forms of child sexual exploitation that occurs offline as well as acts such as grooming (Greijer & Doek, 2013). While details are scarce, end-user perpetrators of OSEC are typically middle-aged men located in Western countries (Brown, Napier & Smith, 2020), while most children are 13 years of age or under (IWF, 2018).

The specific and long-term impacts of OSEC on survivors in the Philippines is unknown and under-researched (Gill, 2021; Merten, 2020), although the impact of CSA is wide ranging and can be both immediate and long-term. For children, CSA can negatively impact cognitive functioning (Barrera, Calderon & Bell, 2013) as well as mental health issues including posttraumatic stress disorder, depression and anxiety (Cashmore & Shackel, 2013; Lindert et al., 2014; Wurtele, 2009). Across the life-course it can negatively impact a range of short and long-term physical, psychological social, educative and economic wellbeing (Cashmore & Shackel, 2013; Blakemore et al., 2017). There are also vicarious trauma effects of CSA on the families and communities of survivors (Blakemore et al., 2017).

While child protection efforts and social services have expanded, rates and harms of OSEC in the Philippines are burgeoning and struggle remain in responding to the needs of survivors and their families. Currently, the chief interventions against OSEC include education and public awareness campaigns as well as law enforcement responses, although their effectiveness is unclear and there is little rehabilitative support available (Gill, 2021; Merten, 2020). Overall, there are a lack of evidence-based programs (Gill, 2021), while the Philippines' child protection system has been found to be frequently inconsistent and under-resourced (Author's own; Author's own), and high numbers of children in the Philippines experience abuse and neglect in serious forms (Ramiro, Madrid & Brown, 2010). Other barriers to successful intervention strategies in the Philippines include limited sustainable funding streams, fragmented services, and limited local government capacity (Author's own), while prevention efforts are undermined by social determinants include socio-economic marginalisation, poverty and family dysfunction (Gill, 2021).

Activities to prevent and respond to OSEC in the Philippines, including their adequacy are currently unclear, there is a critical lack of understanding of the distinct circumstances of the socio-cultural contexts that surround it, as well as how it is understood and conceptualised across communities. Crucially, there is limited understandings of the key drivers of OSEC in the Philippines as well as limited understanding and evaluation of the evidence currently available. While some research on

OSEC in the Philippines is emerging, including community level ethnographic accounts (Ramiro et al., 2019) and analysis of its characteristics and prevalence (IJM, 2020a), there is little understanding of the current scope of evidence available that can inform policy and practice responses. This has much to do with the recent proliferation of this issue, its complexities, as well as the challenges in researching OSEC which often goes unrecognised and hidden as a social issue. Further, collection of relevant data and the development of evidence of this type is challenging to generate, given the sensitivities, stigma and frequent non-disclosure of CSA more generally (Collin-Vezina et al., 2015).

In response, this scoping review aims to provide a comprehensive understanding of current research on OSEC in the Philippines. Its primary objective is to determine the current evidence base for OSEC in the Philippines across three key domains; 1) the characteristics of OSEC, 2) its key drivers, and 3) prevention and intervention approaches. Its intention is to contribute to a more robust understanding of the current evidence landscape, and in turn, inform policy, program and practice responses that can reduce the vulnerabilities of children and enhance the prevention of OSEC. The research question guiding this review is; *What are current understandings of Online Sexual Exploitation of Children (OSEC) in the Philippines including its characteristics, key drivers, and intervention approaches?*

2. Methodology

2.1. Scoping review method

This review was conducted in accordance with Arksey and O'Malley (2005) widely utilised scoping review methodology which includes five stages; (i) developing a research question; (ii) identifying relevant studies systematically; (iii) selecting and screening relevant studies as per the inclusion and exclusion criteria; (iv) charting the data; and (v) collating the results. This approach allows for the review and synthesis of research as well as predetermined, and therefore, replicable criteria (Pickering & Byrne, 2014). As a methodological approach, a systematic scoping review aims to collate and synthesise existing knowledge pertaining to a research topic, while allowing for future replication for further appraisal of findings (Arksey & O'Malley, 2005; Littell, 2008), ideal for determining the extent of a body of literature on a specific topic, as well as identifying gaps in research and knowledge (Gatwiri et al., 2019; Munn et al., 2018).

2.2. Inclusion and exclusion criteria

To achieve the aims of this research, studies included in this review were limited to those that examine Online Sexual Exploitation of Children (OSEC) in the Philippines. This review understands OSEC as per the IJM (2020a) definition included earlier. Children are defined as those under the age of 18, as per the United Nations Convention on the Rights of the Child (UN, 1989). According to the anti-Child Pornography Act of 2009 in the Philippines, a child 'refers to a person below eighteen (18) years of age or over but is unable to fully take care of himself/herself from abuse, neglect, cruelty, exploitation or discrimination because of a physical or mental disability or condition.' (Republic Act no. 9775, 2009). The studies included had to be original and empirical research, either published in an academic journal (peer reviewed) or studies authored by a reputable government or non-government organisation (grey literature), and written in English or Filipino, as well as published after 2005. Non-empirical work, non-systematic reviews, and other document types were excluded. In this review, grey literature refers to literature that is not formally published in sources such as books or academic journals, such as reports and dissertations (Higgins, et al., 2019) and can be considered reputable based on interpretations of the expertise of the individual or organisation that produce the research (Pappas and Williams, 2011).

Table 1
Search terms.

Search terms	(Philippine* OR Filipin*) AND (Sex*) AND (protect*) OR (abus*) OR (violen*) OR OR (assault) OR (maltreat*) OR (punish*) OR (exploit*) OR (traffick*) OR (harm*) OR (mistreat*) OR (online) OR (internet) OR (prostitute*) OR (tech*) OR (computer*) OR (porn*) OR (image*) OR (materials) OR (indecent) OR (webcam) OR (live*) OR (stream*) OR (darkweb) OR (sextortion) OR (live) OR (show) OR (groom*) OR (victimisation) OR (victimization) OR (cyber*) OR (survivor) OR (paedophile*) OR (incest*) OR (social media) OR (streaming)
Filipino terms	(Pahamak) OR (abuso) OR (pananakit) OR (pag-abuso) OR (paghubo) OR (bata) OR (musmos)

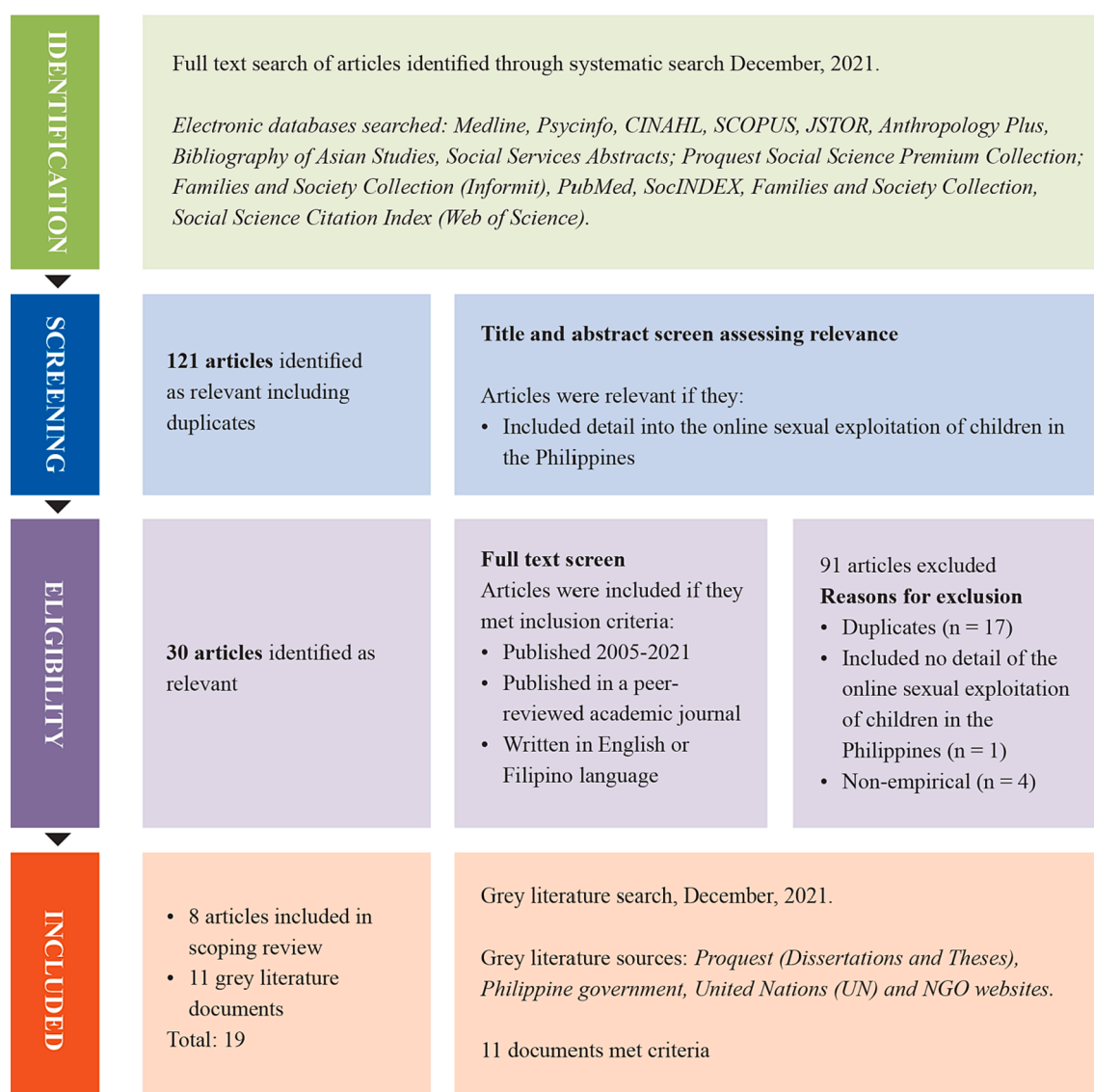
2.3. Search strategy

A systematised search strategy was undertaken in December 2021. Initially, a set of key search terms were developed collaboratively by the authors, incorporating generally accepted terminology relevant to OSEC, and these terms were checked via contact with experts in the field. Search terms indicating the location of interest (the Philippines) were combined with terms relating to the mediums of online sexual

exploitation as well as types of sexual abuse. These terms and their combinations are presented in Table 1. To accommodate some of the databases, variations in the syntax of searches occurred.

The systematic search strategy incorporated two elements. Firstly, it focused on peer-reviewed literature located in peer-reviewed academic journals via a systematic search of relevant scholarly databases. Secondly, to identify relevant studies published in the grey literature, a search was undertaken of key Philippine government (national and local), United Nations and key international and Philippine non-government organisation (NGO) websites. A summary of the search strategy is detailed in Fig. 1. Fourteen electronic databases were searched for academic research. These databases were chosen for their international coverage and interdisciplinary scope, representing the largest across the fields of social work, health, sociology, anthropology and Asian studies, and thus having a strong likelihood of retrieving relevant articles.

Grey literature was sourced via consultation with subject matter experts, as well as through a search of websites known to be undertaking research in this area. Government websites included the Philippines' Department of Justice, Department of Social Welfare and Development, Council for the Welfare of Children (CWC), anti-Money Laundering Council, Senate, and Congress websites. NGO websites included the

**Fig. 1.** Systematised flow chart.

United Nations Digital Library, United Nations Office on Drugs and Crime (UNODC), International Labour Organization (ILO), End Child Prostitution and Trafficking (ECPAT) International and Philippines, PLAN International and Philippines, International Justice Mission, The United Nations Children's Fund (UNICEF) including their Office of Research-Innocenti, World Vision Philippines, Terre Des Hommes (TDH), Save the Children, Child Protection Network, Internet Watch Foundation (IWF), WeProtect Global Alliance (WPGA), and a united body of Financial Intelligence Units (FIUs) called The Egmont Group. Grey literature is often incorporated into scoping reviews, either as a primary focus, or in addition to academic, peer-reviewed studies, as it can provide insights from more diverse research actors who are frequently local knowledge holders (Chakraborty, et al., 2021). Reference lists of relevant grey literature and academic literature were also examined for relevant studies.

2.4. Study selection

A total of 121 papers were identified in academic journals and retained for review. A systematised flow chart of the search process is detailed in Fig. 1. Title and abstracts were screened and incorporated if meeting the inclusion criteria. Articles had to have been published between 2005 and 2021, a time frame that captures the rise of information technology and the widespread adoption of the internet and social media and the rise of OSEC as a phenomenon. Articles also had to include details relating to online sexual exploitation of children in the Philippines, be empirical research, and be published in an academic, peer-reviewed journal, or were excluded.

3. Research included

A total of eight academic articles and 11 research reports met the criteria of the scoping review and were retained for analysis (See Appendix 1 for study summaries). A data extraction table was used to record the important characteristics of each study which included; study design, research question/aims, OSEC definitions used, participants/sample, methods, analytical approach, study limitations, characteristics of OSEC, survivor characteristics, demand-side offender characteristics, drivers of OSEC, examples of prevention/intervention, key findings, policy and practice recommendations. The data extraction process was undertaken and reviewed by multiple authors of this review. The findings are based on the key information identified across the studies that respond to this study's research question.

4. Findings

4.1. Description of included studies

In total, 19 studies (eight academic articles and 11 grey literature reports) were included that provided insight into OSEC in the Philippines. The study design across the studies included qualitative ($n = 10$), quantitative ($n = 2$), mixed methods ($n = 6$) and systematic review ($n = 1$). The qualitative methods deployed across the studies involved interviews, focus groups, document analysis, participant observation and participant generated videos. Quantitative methods present involved surveys as well as analysis of reports and cases of OSEC. Data sources for academic articles included; news articles (Febro-Naga & Tinam-isan, 2021; Hernandez et al., 2018), financial transaction data (Brown, Napier & Smith, 2020; Cubitt, Napier & Brown, 2021), online chat logs of child sex demand-side offenders (Napier, Teunissen & Boxall (2021), adult sex-trafficking survivors (Ju, Poveda, & Thinyane, 2021), children experiencing homelessness (Davis & Miles, 2019), as well as community informants and stakeholders (Ramiro et al., 2019). Data sources for the grey literature studies were more diverse. Five included child or adult survivors of OSEC (Dedase-Escoton et al., 2020; Glarino & Davis, 2017; Kuhlman & Auren, 2015; Plan International, 2017; Terre

Des Hommes, 2013b) and five studies included data collected with stakeholders relevant to OSEC, such as family members, social workers, law enforcement officials and advocates (Dedase-Escoton et al., 2020, Glarino & Davis, 2017; Kuhlman & Auren, 2015; Plan International, 2017; UNICEF, 2020, World Vision Philippines, 2020). Some studies analysed documents such as OSEC case files, research literature, online chat room data or relevant data such as internet protocol (IP) addresses of demand-side offenders (Glarino & Davis, 2017; IJM, 2020a; IJM, 2020b; Terre Des Hommes, 2013b; UNICEF, 2016, UNICEF, 2020). Five out of the eight articles mentioned ethical considerations; three detailed institutional approval by a human research ethics committee. Research ethics were well described across the grey literature with eight studies including details of research ethics and procedures, while three offered none.

4.1.1. Study location and authorship

The peer-reviewed articles were published across six peer-reviewed journals including one Philippine based journal (Acta Medica Philippina). The geographical focus and the location of the studies varied. Three studies collected data in Philippine communities including in Metro Manila (Davis & Miles, 2019; Ramiro et al., 2019), and another in an undisclosed location (Ju et al., 2021). Three articles concentrated on Australia as a 'demand-side' country and the Philippines as 'source-country', focusing on demand-side offender profiles (Brown et al., 2020) and characteristics (Cubitt et al., 2021) and chat logs (Napier et al., 2021). Hernandez et al., (2018) and Febro-Naga and Tinam-isan (2022) conducted desk-based analysis of media reporting about OSEC.

All grey literature studies were published by international non-government organisation (INGOs) except for a master's dissertation undertaken at the University of Lund (Sweden). The National Capital Region (NCR) or Metro Manila were primary research locations in three studies (IJM, 2020; Kuhlmann & Auren, 2015; Plan International Philippines, 2017; UNICEF Philippines, 2020), while others extended their focus to other urban and regional locations across the Philippines such as Angeles City, Taguig City, Cebu City and provinces, municipalities of Cordova and Dalaguete, and city of Lapu-Lapu in Cebu, Pampanga, and Cagayan de Oro (Glarino & Davis, 2017; Terre des Hommes, 2013b; UNICEF Philippines, 2020; World Vision Philippines, 2020). IJM's (2020a) mixed data analysis, and UNICEF's (2016) systematic review both provide a national-based picture of OSEC in the Philippines. Two studies take an international demand-side focus; IJM (2020b) analyses OSEC demand-side offenders in the UK, while Terre des Hommes (2013a) examines online chat rooms used by demand-side offenders.

4.2. Characteristics of OSEC

4.2.1. OSEC terminology

The dominant terminology used across the studies is 'online sexual exploitation of children', although 'cyber child porn' (Plan International, 2017; Terre des Hommes, 2013a; UNICEF Philippines, 2020) is another term used across the grey literature. In the academic literature, forms of OSEC were defined using terms such as 'cybersex trafficking/violence' (Brown et al., 2020; Hernandez et al., 2018; Febro-Naga & Tinamisan, 2022) and 'ICT-related violations of privacy' (Febro-Naga & Tinamisan, 2022) which covers several types including OSEC and sexual abuse of children. Broader terminology was utilised in the academic articles to encompass numerous specific forms of exploitation and abuse such as 'online grooming' and 'sexual extortion or sextortion.' 'Cyber Violence Against Women and Girls' was also used in one study to refer to gender-based violence occurring online including harassment and sexual exploitation and abuse of children (Febro-Naga & Tinamisan, 2022). 'Webcam child sex tourism' (Brown et al., 2020; Kuhlmann & Auren, 2015; Terre des Hommes, 2013b; UNICEF Philippines, 2016), and 'live streaming of child sexual abuse' (Brown et al., 2020; Cubitt et al., 2021; Glarino & Davis, 2017; Kuhlmann & Auren, 2015; Ramiro et al., 2019) were other common terms that appear in both grey and academic

literature. Additional terms such as ‘violence,’ ‘abuse,’ and ‘commercial exploitation’ were used to define specific characteristics of OSEC. For instance, OSEC is captured in studies on commercial sexual abuse or exploitation of children (CSEC) (Febro-Naga & Tinamisan, 2022; Kuhlmann & Auren, 2015; Plan International, 2017). While variety exists in their definitions of these terms, core components of the definitions used in both academic and grey literature include sexual activities or sexual depictions of a minor online perpetrated by a foreigner and compensated financially or in other forms of reward. Several definitions also include directed abuse and real time exploitation or ‘livestreaming’ using information and communications technology (ICT). One study used ‘child pornography’ to describe children’s way to engage in OSEC through the CSEC industry (Plan International, 2017). Both academic and grey literature addressed children as ‘victims’ and ‘survivors’ and rarely relied on only one of these terms. Because of the strengths-based connotations associated with the word ‘survivor’, this paper uses this term unless directly quoting from a source.

4.2.2. Characteristics of OSEC survivors

The age range of children noted in the research is between 18 months to 18 years of age and are predominantly, but not exclusively, female (Brown et al., 2020; Davis & Miles, 2019; Glarino & Davis, 2017; Hernandez et al., 2018; Plan International, 2017; Ramiro et al., 2019). In cases involving multiple children, they were reported to be either siblings, cousins, friends or classmates (IJM, 2020a; UNICEF Philippines, 2020). Plan International (2017) found that older OSEC survivors between 12 and 18 years old were also linked to CSEC.

4.2.3. Characteristics of OSEC perpetrators

The literature identifies two types of OSEC perpetrators: a source country trafficker and a foreign demand-side offender. Forty-one percent of source country traffickers were found to be biological parents with other relatives in 42 % of cases (IJM, 2020a). Most studies confirmed traffickers were related to the children and also identified community bystanders, neighbours, or previous survivors of OSEC as perpetrators. In some cases, perpetrators will establish community cybersex dens involving multiple children, while others offer financial security to lure children into participation. Foreign demand-side offenders were typically English-speaking males with ages ranging from 17 to 72 (Brown et al., 2020; Hernandez et al., 2018; IJM, 2020a; Plan International, 2017; Ramiro et al., 2019; UNICEF Philippines, 2016;), and from Western countries, such as the US, UK, Australia, and parts of Europe, though perpetrators have also been found in Lebanon, China, Korea, Mexico, and India. Brown et al., (2020) found that 10 % of perpetrators had previously committed at least one sexual offence, while 44.5 % had committed other criminal offences. Plan International (2017) also records cases of OSEC happening in the CSEC industry that are facilitated online where customers are usually foreign males around 20 to 50 years old. Occasionally, foreign demand-side offenders would travel to the Philippines to physically engage in sexually exploiting children (Terre des Hommes, 2013b). UNICEF Philippines (2020) reported cases of traffickers that were drug users or previous survivors of online sexual abuse and exploitation.

4.2.4. Locations of OSEC offending

OSEC facilitated by family members, relatives or neighbours occurs in private homes within communities, and in some cases in ‘cybersex dens’ through operations organised by individual traffickers or gangs (Hernandez et al., 2018; Dedase-Escoton et al., 2021; Kuhlmann and Auren, 2015; Ramiro et al., 2019; Terre des Hommes 2017; UNICEF Philippines, 2020; UNICEF Philippines, 2016). Hernandez et al., (2018) state that a ‘cottage industry’ of community-based OSEC operations are emerging in some locations. Ramiro et al., (2019) detail that OSEC can occur in internet shops where conversations initiated by the child, traffickers, or demand-side offenders using online platforms shift to sexual exploitation.

4.2.5. Medium of sexual exploitation and abuse

The research details some online platforms used for OSEC. The surface web is where OSEC takes place and is often perpetrated through livestreaming on a computer or mobile phone (UNICEF Philippines, 2020). Sites such as Yahoo Messenger (no longer available) (Napier et al., 2021; Terre des Hommes, 2013a), Facebook (Kuhlmann & Auren, 2015; Hernandez et al., 2018; Napier et al., 2021; World Vision Philippines, 2020), and Skype (Brown et al., 2020; Hernandez et al., 2018; Napier et al., 2021; Terre des Hommes, 2013a) were identified in the literature, while ambiguously referencing adult webcam sites and online dating groups (Hernandez et al., 2018; International Justice Mission, 2020; Terre des Hommes, 2013a, b; UNICEF Philippines, 2016). Plan International and UNICEF also recognise that OSEC is also happening in the commercial sex industry through online transactions facilitated by a pimp as the trafficker and middleman contact person through a chat room (Plan International, 2017; UNICEF Philippines, 2016).

4.2.6. Types of sexual exploitation and abuse

Types of abuse vary from erotic displays, the touching of genitals, dancing naked, up to sexual abuse (rape) by an adult or forced to engage in sex acts including intercourse with other children in front of the camera (Davis & Miles, 2019; Glarino & Davis, 2017; Hernandez et al., 2018; Ramiro et al., 2019; Terre des Hommes, 2013a, b; UNICEF Philippines, 2020; UNICEF Philippines, 2016; World Vision, 2020). IJM identifies forcible sexual penetration, children forced to engage in sex acts with other children, sexual abuse by adults, and other harmful acts such as bestiality (IJM, 2020b). Live sexual acts or shows usually last for 15 to 30 min (Terre des Hommes, 2013b).

4.2.7. Length of sexual abuse and exploitation

Several studies report the duration of OSEC noting that children were typically exploited for several years. International Justice Mission (2020) stated that the average length was two years before a child were rescued, with a minimum of two months to a maximum of four years of exploitation. In a UNICEF Philippines (2020) study, all demand-side offenders interviewed in the study facilitated OSEC for five to eight years before arrest. One study detailed that OSEC survivors were exploited for three to five years (Plan International, 2017).

4.2.8. Prevalence

None of the studies identify regions where OSEC is most prominent in the Philippines. Instead, individual cities were the focus for each study, overlooking the implications on national prevalence. Similarly, only two studies mention prevalence, demonstrating a dearth of research that measures prevalence (IJM, 2020a; Terre des Hommes, 2013a). UNICEF (2020) argues that key informant interviews indicate increased prevalence of OSEC despite a lack of quantitative evidence.

4.3. Risk factors for OSEC

4.3.1. Socioeconomic status and poverty

Socioeconomic status and experiences of poverty are consistently linked to OSEC across the research reviewed, featuring in 15 of the studies. Children exploited by OSEC, as well as their families and communities, typically occupy vulnerable socioeconomic positions, influencing decision making and susceptibility to participating in OSEC. In many cases, families live in insecure or no housing (UNICEF, 2021), while analysis of online exchanges between CSA live streaming demand-side offenders and children or traffickers in the Philippines identified that these children frequently discussed a need for food, clothes, and school tuition (Napier et al., 2021). Comparatively low levels of social protection in the Philippines compound the vulnerability of children and traffickers (University of the Philippines et al., 2016).

Explanations among Philippines-based OSEC survivors and perpetrators centre on their need for income to support their families (Plan

International, 2017; Terre des Hommes, 2017), with OSEC perceived as “easy money” across multiple studies (Dedase-Escoton et al., 2021, 35; Ramiro et al., 2019, 9; Terre des Hommes 2013b, 23; UNICEF 2021, 66). One session of OSEC can earn the child and traffickers as much as USD 100 (Kuhlmann & Auren, 2015), far greater than the legislated daily minimum wage of approximately 5.5 USD (National Wages Productivity Commission, 2022). A low level of education and skills among children’s parents limit their employment access to low-income informal employment, such as house helpers, vendors, or drivers (Terre des Hommes 2017; UNICEF, 2021). In a sample of 36 case files from DSWD, nearly half of the children’s parents had completed a primary level of education and a little over a third completed high school (Terre des Hommes 2017). Circumstances of unemployment and insufficient family income contributes to the motivations of families to enter and perpetuate OSEC (Ramiro et al., 2019; Terre des Hommes, 2013b; UNICEF, 2021).

4.3.2. Facilitative technology and the internet

The growth of internet use is cited as a key driver of OSEC both in demand and supply across the studies. Terre des Hommes (2017) found that between 2011 and 2015 internet access increased by 500 percent in the Philippines and it is estimated that there are 750,000 demand-side offenders connected to the internet at any one time (Terre des Hommes, 2013a). In the Philippines, convenient access to the internet through affordable devices, such as smart phones, tablets, and laptops as well as venues such as internet cafes (e.g., *PisoNet*, a computer that can be used by paying a peso coin into a coin slot and automatically shuts down after a few minutes) is central to engaging in livestreaming child sexual exploitation (Dedase-Escoton et al., 2021; University of the Philippines et al., 2016; UNICEF, 2021; World Vision, 2020). Where OSEC has occurred, internet use by children is frequently unsupervised (Ramiro et al., 2019; University of the Philippines et al., 2016). Monitoring of children’s internet use in internet cafes can be too difficult to observe sexual grooming or online sex chats via social media platforms (Ramiro et al., 2019).

The role of social media and networking, via platforms such as Facebook and online dating websites in establishing contact between young people and perpetrators has also been observed in some studies (Ramiro et al., 2019; Terre des Hommes, 2013a; University of the Philippines et al., 2016). Facebook and Yahoo! Messenger were the most common online platforms for communication between Filipino survivors and traffickers with demand-side offenders and perpetrators in Australia (Napier et al., 2021). These two platforms, along with Skype and Viber, were used to view CSA livestreaming (Napier et al., 2021). Other research notes the unsupervised use of the internet has placed children at risk of online sexual grooming. Internet cafe managers claimed they supervise their computer units to avoid sexual activities (Ramiro et al., 2019). However, Hernandez, et al (2018) states that individual operations conducted in internet cafes, *PisoNet*, or private households, in contrast to cybersex dens, are not typically reported in news reports (between 2011 and 2015), indicating limited overall awareness of these contexts of OSEC.

4.3.3. Ease of international financial transactions

The growth of online remittance technology, predominantly used by overseas Filipino workers (OFWs), has made financial transactions related to OSEC progressively easier (Brown, et al, 2020; UNICEF, 2021). Western Union, Cebuana Lhuillier, World Remit, and Remitly were identified as commonly used financial institutions (Hernandez et al., 2018; Napier et al., 2021; UNICEF., 2016). Gcash and other more recent prepaid debit cards, Bitcoin, Zoom and Azimo were also used by perpetrators to fund OSEC (Hernandez et al., 2018). Money transfer agencies were used for OSEC (or cyber pornography) in comparison to cash transactions as the usual form of payment for cases linked to CSEC (Plan International, 2016). Remittance centres (such as Western Union, Money Gram, and M Lhuillier) have minimal restrictions when

recipients claim payments, requiring only serial numbers without checking identification cards (UNICEF, 2021).

4.3.4. Demand-side drivers of OSEC

Just two studies considered the international demand-side drivers of OSEC. Brown et al., (2020) highlight the affordability of livestreaming for perpetrators in high income countries, analysing 2,714 financial transactions from Australian perpetrators to livestreaming traffickers in the Philippines, finding that 25 percent of payments were \$AUD 36 (approx. \$26US) or less, and the median value was \$AUD 78 (approx. \$57) (Brown et al., 2020). Clear barriers exist to detecting and preventing OSEC on the demand-side. The anonymity of demand-side offenders is a challenge for law enforcement to detect OSEC, record evidence and successfully prosecute (Brown et al., 2020; IJM, 2020b), while OSEC involving livestreaming is challenging to prosecute, given the difficulties of monitoring, recording evidence and the ease in which perpetrators can protect their identity (Brown et al. 2020; IJM, 2020b). When prosecution is successful, for example in the UK, demand-side offenders can receive small sentences, ranging from non-custodial to a few years in prison (IJM, 2020b).

4.3.5. Governance and regulation of OSEC

The Philippines has several laws to specifically protect children from OSEC, however studies argue that their implementation is questionable. Despite the “anti-Child Pornography Act”, or RA9775, having been enacted since 2009, there had been limited successful prosecution of perpetrators between 2009 and 2016 (University of the Philippines, et al. 2016). Febro-Naga and Tinam-isan (2022) add that several forms of cyberviolence have been challenging for law enforcement officials in the Philippines. Instead of proactive law enforcement to prevent OSEC in communities, law enforcement agencies focus on reactive policies, which means reporting is required before an investigation begins (Febro-Naga & Tinam-isan 2022; Terre des Hommes 2013a).

4.3.6. Family dynamics

Seven grey literature studies and one academic article cite the role of family dysfunction in circumstances of OSEC, highlighting neglect, lack of parental supervision, or the inability of parents to support large families (Ramiro et al., 2019; University of the Philippines et al., 2016; UNICEF, 2021). In a study with 32 children and adolescents exploited in the commercial sex industry in selected areas of Metro Manila, half of the participants did not have positive relationships with members of their household (Plan International, 2016), while Ramiro, et al’s (2019) findings detail the motivation of children to participate in OSEC in circumstances of family conflict or breakdown. Terre des Hommes (2017) demonstrate that children exploited in OSEC feel isolated and insecure and are seeking protection and a sense of identity. Parental authority, a leading cultural aspect of family life in the Philippines, known as “utang na loob” (an obligation to return ‘favours’ including parents’ sacrifices), can be involved in OSEC to encourage children to support the family financially (Dedase-Escoton et al., 2021; Glarino & Davis, 2017; Terre des Hommes, 2013a;), and also leave children misunderstanding their own exploitation (University of the Philippines et al., 2016). In some cases of OSEC, parents can be aware of their children’s involvement in OSEC yet choose to ignore it because of their financial needs (Glarino & Davis, 2017; IJM 2020a; Ramiro et al., 2019; Terre des Hommes, 2013a), while Ramiro et al., (2019) notes that ‘online sex work’ can be transferred from parents to their children (Ramiro et al., 2019).

4.3.7. English proficiency

Studies note the English proficiency of Filipinos as a potential risk factor that removes language barriers between children or local traffickers and perpetrators and in turn facilitates OSEC (Dedase-Escoton et al., 2021; Kuhlmann & Auren, 2015; UNICEF, 2021; University of the Philippines et al., 2016). Communication and financial transactions (including during livestreaming sessions) with perpetrators, the

majority of whom are English speakers, are enabled by the capacity of survivors and perpetrators to also communicate in English (Dedase-Escoton et al., 2021; Terre des Hommes, 2013b). In some instances, children who cannot speak English utilise Google Translate when chatting with perpetrators (Terre des Hommes, 2013b).

4.3.8. Geographical location

Some locations and contexts in the Philippines are more proximate to OSEC than others. Locations with higher levels of tourist attractions and foreign tourists, transport infrastructure and an existing sex industry are more likely to foster OSEC (World Vision, 2021; Plan International, 2016; Ramiro et al., 2019). In the Philippines, the historical acceptance and trust given to foreigners, not only as tourists but also as intimate partners, is part of a unique set of converging risk factors that lead to OSEC (University of the Philippines et al., 2016). UNICEF (2021) and University of the Philippines et al., (2016) note the implications of natural disasters for OSEC in the Philippines, considering that human trafficking has been observed to increase in post-disaster sites. For example, after Super Typhoon Haiyan (locally known as 'Yolanda') hit the Philippines in 2013, agency reports showed an increase in sexual abuse cases (University of the Philippines et al., 2016).

4.3.9. Beliefs around the limited harm of online sexual exploitation

Studies detail that families, and more broadly communities, can perceive children's involvement in OSEC as harmless, because of the absence of physical touch and the perpetrator being online (Dedase-Escoton et al., 2021; Kulmann & Auren 2015; Ramiro et al., 2019; UNICEF 2021; University of the Philippines et al., 2016). Additionally, survivors of OSEC frequently do not recognise themselves as victims since they perceive the exploitation as acceptable and economically beneficial, especially to their families (Dedase-Escoton et al., 2021). Key informant interviews in two local barangays revealed that young people believe that their online activities would be anonymous and private, thereby removing the individual risk of exposure and shame (Ramiro et al., 2019). Community perceptions about online sex "work" vary according to the age of the survivor (Ramiro et al., 2019). If survivors were below 12 years of age, most of the respondents expressed disapproval, but for those between 13 and 17, respondents believed that they should be held more responsible for their actions given their perceived awareness of right or wrong (Ramiro et al., 2019). It is suggested that community members tolerate OSEC due to a lack of knowledge about OSEC, its harms, awareness of OSEC as a crime, as well as a lack of capacity to intervene (Dedase-Escoton et al., 2021).

4.3.10. A culture of silence around OSEC

A culture of silence surrounding sexual violence against children is evident. University of the Philippines, et al., (2016) identify a fear of reporting OSEC, while survivors try to avoid causing trouble for the family, due to shame, stigma and possible reprisals (Febro-Naga & Tinam-isan, 2022). Parents may be aware of their children's involvement in OSEC but choose not to act on the matter due to a need for the income (Ramiro et al., 2019). Neighbours may also be aware, but tolerate the activities and refrain from interfering with the family's affairs to maintain peace in the community (Ramiro et al., 2019; UNICEF, 2021). In a study conducted in three communities in the Philippines, only 34.14 % of adult respondents and 10 % of children were aware of laws and local ordinances related to OSEC (World Vision, 2021). Nonetheless, 77 % said that they would report OSEC incidents within their communities to authorities (World Vision, 2021). Reasons for not reporting sexual violence against children included the lack of awareness regarding community-based child protection services, the belief that child abuse is a private family matter, and low help-seeking behaviour among children (World Vision, 2021).

4.4. OSEC interventions

Just one article (Ju et al., 2021) and two grey literature studies (Dedase-Escoton et al., 2021; Glarino & Davis, 2017) examined the efficacy of an OSEC intervention or prevention approach, a significant gap across this body of research. Ju et al., (2021) explored with OSEC survivors the benefits of using participatory video methods to assist recovery and wellbeing, finding that these methods support communication, reflective engagement of their lived experiences, and the development of agency and autonomy. Dedase-Escoton et al., (2021) identify effective elements of support for OSEC survivors, including a robust assessment of their psychosocial needs, providing economic support, and the use of alternative care placements where family was involved in offending. Terre des Hommes (2017) draw on interviews and document analysis of the Philippines' Department of Social Welfare and Development's support for OSEC survivors, highlighting the need for further development of culturally relevant interventions, an enhanced focus on the mental health of survivors, the involvement of family in support, and alternatives to residential care for children. Other studies identified current programmatic efforts to respond to OSEC, such as the 'Go-to-School' in which students and teachers are educated about OSEC and its risks (World Vision, 2020), the 'Parenting Effectiveness Service' (PES) which trains parents and caregivers in effective parenting skills to prevent OSEC (UNICEF, 2020), and 'Cybersafe' which is a Department of Education developed training for teachers (World Vision Philippines, 2020).

Some research offers recommendations, based on their findings, of strategies to prevent OSEC in the Philippines. UNICEF (2020) and IJM (2020a) suggest the growth of hotlines dedicated to reporting OSEC, such as the National Center for Missing and Exploited Children Cyber-Tipline which receives and makes available to law enforcement reports of suspected child sexual exploitation, as well as the development of an OSEC response framework that details a continuum of interventions from prevention, identification, rescue, trial, and after care (IJM, 2020a). Specific prevention ideas suggested across the studies include public awareness and education campaigns around the risks of OSEC as well as enhanced social protections including expanding the Philippines' conditional cash transfer scheme, livelihood programs, employment initiatives (UNICEF, 2020; World Vision, 2020). *International Justice Mission (2020b)* emphasises the need for demand-side prosecution of offenders and stronger overall justice for OSEC survivors. Both Terre des Hommes (2017) and Plan International (2016) note that legislative protection and frameworks have already been established in demand-side countries, however there is a strong need to improve enforcement and prosecution of OSEC offenders.

5. Discussion

This scoping review identifies limited empirical engagement with the issue of OSEC in the Philippines. The research undertaken has largely been driven by the INGO sector, with university-based academic research providing some important, but limited insights. While the profiles of OSEC survivors and demand-side offenders are established and the characteristics of this form of abuse are described across the studies reviewed, a range of other insights that can inform policy and practice responses are missing. Most critically these include: the prevalence of OSEC in the Philippines, socio-cultural understandings of OSEC including how childhoods are constructed as well as cultures around the sexualisation of children, the effectiveness of the Philippines criminal justice and child protection systems in responding to OSEC, the efficacy of current prevention and intervention efforts, and research that incorporates the insights of OSEC survivors, especially to design and implement interventions. There is also no standard term used to describe OSEC, which shows an overarching inconsistency in the literature. Several terms refer to OSEC broadly, while others are narrowly defined and more specific to livestreaming. Terms used to describe source and

Table A1

Overview of reviewed studies.

Author (year)	Title	Publication type	Study aims	Study setting	Participants/data source	Method	Key findings
Brown, Napier, & Smith (2020)	Australians who view live streaming of child sexual abuse: An analysis of financial transactions.	Article	Identify the characteristics of Australian CSA live streaming offenders, as well as the patterns of financial transactions by offenders.	Australia	Financial transaction data of OSEC offenders.	Quantitative analysis of financial transaction data.	As individuals purchased more CSA live streaming, the median amounts they paid increased and the transactions became more frequent. Individuals were likely to be aged in their 50 s or 60 s and the majority (55 %) had no criminal record.
Cubitt, Napier, & Brown (2021)	Predicting prolific live streaming of child sexual abuse.	Article	To detail the characteristics of offenders who live stream CSA in high volumes.	Australia	Financial transaction data of OSEC offenders.	Quantitative analysis of financial transaction data.	Individuals spend a relatively low amount for high-volume live streaming OSEC (below \$55) at intervals of less than 20 days. A history of low-harm offending was common among offenders.
Davis & Miles (2019)	"They Shamed Me": An exploratory study on the vulnerabilities of street-involved boys to sexual exploitation in Manila, Philippines.	Report	To assess the risk factors and vulnerabilities of street children in Manila and provide analysis of their needs, vulnerabilities, and resiliencies.	(Manila) Philippines	51 'street-involved' boys from Manila.	Mixed method participant survey.	Participants experience physical, sexual and substance abuse. 65 % of participants had experienced sexual abuse. Social networking websites are a venue for sexual exploitation.
Dedase-Escoton et al. (2021)	A study on online sexual exploitation of children for aftercare reintegration.	Report	Explore the social and environmental contexts of OSEC survivors to understand risk factors, impacts and gaps in interventions	(Metro Manila) Philippines	18 OSEC survivors 40 non-offending family members, community members, and service providers.	Qualitative questionnaires and focus groups.	OSEC survivors remain vulnerable upon return to their family and community due to socioeconomic vulnerabilities. If reintegration with family is not possible, independent living programs should be offered to OSEC survivors. Comprehensive pre-reintegration assessment and planning produce effective reintegration.
Febro-Naga, & Tinam-isan (2022)	Exploring cyber violence against women and girls in the Philippines through mining online news.	Article	Understand and determine characteristics of trends of cyber violence against women and girls.	Philippines	3,506 news articles published between 2015 and 2020.	Text mining – Topic Keyword Model	There are increasing numbers of news articles related to OSEC. A range of types of technology related violence were recorded: exploitation and

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Table A1 (continued)

Author (year)	Title	Publication type	Study aims	Study setting	Participants/data source	Method	Key findings
Glarino et al. (2017)	Online child sexual Exploitation in the Philippines.	Report	Identify profiles of child-victims of OSEC in the Philippine context and to develop a stronger understanding of the emotional and behavioural impacts of OSEC and provide recommendations for Philippine-specific interventions.	(Regions III, Central Luzon; and VII, Central Visayas) Philippines	25 Department of Social Welfare and Development (DSWD) houseparents 6 Parents of survivors 12 DSWD staff members 36 case files of child survivors	Mixed methods including qualitative case files review, focus group discussions, child behaviour checklist assessment, semi-structured and in-depth interviews.	sexual abuse of children, ICT-related violations of privacy, cybercrime, ICT-related direct threats of or physical violence, and cyber harassment. OSEC victims come from poor families and have limited access to opportunities, education, and employment. OSEC often involves a facilitator who connects the consumer (usually outside the country) to particular children in the community.
Hernandez et al. (2018)	Sexual exploitation and Abuse of children online in the Philippines: A review of online news and articles.	Article	Provide insights into the sexual exploitation and abuse of children online (SEACO) in the Philippines via analysis of online news.	Philippines	55 news reports from 2011 to 2015	Qualitative document analysis.	There is no tailored or individualised care for OSEC survivors. Of the OSEC cases analysed, around half involved cybersex dens hidden in houses or rented apartments, while others were identified as family-run operations.
International Justice Mission (2020a)	Online sexual exploitation of children in the Philippines: Analysis and recommendations for governments, industry, and civil society.	Report	Estimate the scale of OSEC in the Philippines and to better understand the nature and characteristics of OSEC.	Philippines	Reports of possible incidents of OSEC OSEC legal cases OSEC survivor case files	Mixed method; quantitative analysis of OSEC reports, qualitative analysis of OSEC cases	OSEC victims were between 18 months and 17 years old; one-third of offenders were foreigners. A sharp rise in IP addresses used for OSEC in the Philippines between 2014 and 2017. The majority of OSEC cases were initiated by referrals from international law enforcement agencies.
International Justice Mission (2020b)	Falling Short: Demand-side Sentencing for Online	Report	Explore the UK's criminal justice systems actions in	United Kingdom	OSEC case studies with UK based offenders.	Qualitative document analysis.	OSEC is most frequently a family-based crime, facilitated by young Filipina women who speak English with financial motivations. OSEC offender consumers are more likely to be older men from western countries via the surface web. UK has comparatively lower sentences for UK

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Table A1 (continued)

Author (year)	Title	Publication type	Study aims	Study setting	Participants/data source	Method	Key findings
	Sexual Exploitation of Children		relation to OSEC offenders.				based OSEC offenders. UK offenders who directed and paid for livestreamed child sexual abuse of Filipino children serve on average two years, four months in prison.
Ju, Poveda, & Thinyane (2021)	From voiceless to voicing: The communication empowerment of sex-trafficking survivors by using participatory video.	Article	Explores the potential for participatory video and digital training to support sex-trafficking survivors in the Philippines.	Philippines	13 survivors of online sexual exploitation in the Philippines 7 program staff	Semi-structured interviews and participant generated videos.	Participatory video supports greater communication, expression and reflexivity among OSEC survivors.
Kuhlmann & Auren, (2015)	Nipa Huts with High Speed Internet: Commercial Exploitation of Children in the 21st Century.	Master's thesis	To explore the phenomenon of Webcam Child Prostitution and its characteristics in the Philippines.	Philippines and Cambodia	7 social workers, program managers and law enforcement officials 2 OSEC survivors	Qualitative interview, email interview and focus groups.	Inequality, limited economic opportunities and high availability of internet are drivers of webcam child prostitution in the Philippines.
Napier, Teunissen, & Boxall (2021)	Live streaming of child sexual abuse: An analysis of offender chat logs.	Article	Identify the characteristics and nature of child sexual abuse live streaming offending.	Australia	24 mothers Chat logs from a sample of seven CSA live streaming offenders.	Qualitative thematic analysis.	Sexual offenders pay a median amount of \$51 (AUD) for OSEC. Mainstream messaging and video platforms are used to facilitate abuse and transmit abusive materials. Possible points to intervene include law reform for messaging platforms and regulating the use of remittance services.
Plan International (2017)	Children and the Sex Trade in the Digital Age: A Study on the Commercial Sexual Exploitation of Children in Metro Manila	Report	To provide a comprehensive understanding of the nature, forms, and extent of the problem of Commercial Sexual Exploitation of Children in the Philippines.	(Metro Manila) Philippines	32 children and adolescents involved in the sex industry. 8 key informants (survivors, NGO and government representatives) .	Qualitative interviews, focus group discussion and participant observation.	Poverty is the chief reason for engaging in CSEC with influence from peers and the desire to support family's needs. The facilitation of CSEC has become increasingly easier due to advances in technology.
Ramiro et al. (2019)	Online child sexual exploitation and abuse: A community diagnosis	Article	An exploration of the drivers of OSEC and related community norms.	(Manila) Philippines	144 participants including children and young people and key community stakeholders located	Ethnographic methods including interviews, and	Voluntary exit from the sex industry is due to health-related concerns and a reduced reliance on the financial benefits. OSEC is perceived by young people as normalised, an easy source of money, but also as "disgusting".

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Table A1 (continued)

Author (year)	Title	Publication type	Study aims	Study setting	Participants/data source	Method	Key findings
	using the social norms theory.				in OSEC “hotspots”.	non-participant observation.	Communities tolerate OSEC and frequently do not report possible OSEC to local authorities. Activities involving OSEC could include sexual chatting, showing child sex photos and live videos, as well as sextortion.
Terre des Hommes (2013a)	Becoming Sweetie: a novel approach to stopping the global rise of Webcam Child Sex Tourism	Report	To identify characteristics of Webcam Child Sex Tourism (WCST), the physical and online environment it takes place and its legal status across countries.	No location (online)	Online chat room exchanges.	Qualitative document analysis.	WCST typically takes place on social networking sites, adult webcam sites, online dating sites, and in online chat rooms. The methods identified high numbers of offenders with 20,172 predators from 71 countries paid for webcam sex performances across a 10-week period.
Terre des Hommes (2013b)	Fullscreen on view: An Exploratory Study on the Background and Psychosocial Consequences of Webcam Child Sex Tourism in the Philippines.	Report	To develop an understanding of the nature and extent of WCST and explore its psychological and social consequences for survivors.	(Angeles City, Taguig City, Cebu City and Cebu province, Cordova, and Dalaguete) Philippines	48 children including some OSEC survivors. 65 participants including survivors, parents or relatives, law enforcement representatives, local government officials, social workers, NGO workers, church leaders and community members.	Mixed methods, qualitative interviews and questionnaires.	Children involved in WCST are less likely to be in school and also show significant educational delay. Children involved in OSEC are four times more likely to be from broken homes, particularly those with financial problems or substance abuse issues. For children involved in OSEC, their parents are more likely to use harsh forms of discipline (physical and emotional)
University of the Philippines et al., (2016)	A Systematic Literature Review of the Drivers of Violence Affecting Children: the Philippines.	Report	To identify evidence relating to the drivers of violence against children in the Philippines.	Philippines	149 academic and grey literature studies	Systematic literature review	Poverty, broken homes, poor parenting, consumerism, peer influence, family values and socio-cultural beliefs and norms are connected to OSEC. The money transfer sites most frequently used for OSEC are: Western Union and Cebuana L'Huillier. Types of websites used for distribution of OSEC material include: online dating sites, public

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Table A1 (continued)

Author (year)	Title	Publication type	Study aims	Study setting	Participants/data source	Method	Key findings
UNICEF (2020)	National Study on Online Sexual Abuse and Exploitation of Children in the Philippines.	Report	To investigate OSEC in the Philippines across the areas of child victims, offenders, private sector involvement, and case management.	Philippines	133 interview participants including OSEC victims, OSEC perpetrators, family members, and other OSEC stakeholders. 16 focus groups (participants numbers not detailed)	Qualitative interviews and focus groups.	chat rooms, social networking sites, and adult webcam sites. Offenders groom children in both online and offline contexts. The processes and outcomes of rescuing children from OSEC can be harmful. Criminal justice system is overly dependent on testimonial evidence.
World Vision Philippines (2020)	Community Perspectives on Online Sexual Exploitation of Children: A Study Examining Existing Knowledge and Awareness in Select Areas in the Philippines.	Report	To examine community mechanisms to protect children from OSEC.	Taguig City, Lapu-Lapu City and Cordova municipality (Philippines).	Survey: 611 children (285 male and 326 female) and 618 adults (77 male, 541 female) Focus groups: 179 children and 124 adults Interviews: 12 key informants	Household and child surveys; focus groups and qualitative interviews.	Cultural beliefs around children's harm influence OSEC. Limited awareness of community-based programs that address OSEC. One-third of children aware of OSEC. One in 10 children are aware of laws that protect them from OSEC.

demand-side OSEC perpetrators also vary (e.g., offenders, facilitators, traffickers).

This review provides some clarity around the key risk factors for OSEC in the Philippines. The vulnerabilities that poverty, limited social protection, an accessible and facilitative financial transaction industry and wide-spread proficiencies in English are clear. Child wellbeing in the Philippines lags comparatively in the Asia-Pacific region across multidimensional measures including material wellbeing, health, education, risk and safety (Lau and Bradshaw, 2010), while substantive improvements to levels of inequality and poverty in the Philippines have not occurred in recent decades (Curato, 2017; Yu, 2013; Roche, 2020). OSEC is a clear vulnerability to children and families in these circumstances who have less resources and capacities to manage OSEC related risks (Pells 2012; Myers & Bourdillon 2012; Gabel 2012). There are also issues around community perceptions of what constitutes harm to children, with some in the Philippines holding the view that, in the absence of physical touch and with the perpetrator being online, harm to children is minimal (Dedase-Escoton et al., 2021; Kulmann & Auren 2015; Ramiro et al., 2019; UNICEF, 2021). This is compounded by inadequate responses to OSEC, whereby families and communities can feel elements of shame and stigma, creating barriers to identifying OSEC and responding to concerns about children's safety.

The findings of this review highlight that interventions to prevent or intervene in situations of OSEC require a more developed evidence base. Details of specific programs to prevent OSEC through education or support survivors of OSEC as well as understandings of interventions against OSEC are scarcely reported in the literature. Some argue that responses to OSEC require more preventive programs, education and

interventions in addition to criminal justice system responses, both in the Philippines and in demand-side contexts (Gill, 2021; Merten, 2020). Where initiatives to prevent and respond to OSEC do occur, the requires expansion and evaluation, and they should match governance settings of the Philippines, where government based social, health and education services are heavily decentralised to local government units (Daly et al., 2015; Roche & Flores-Pasos, 2023); UNICEF, 2016). Finally, a robust evidence-base needs to be developed for interventions understanding prevalence and standardised treatments designed and evaluated.

In the absence of adequate social protections, the protective capacity of family, community and social relationships need to be supported to help identify and respond to incidences of OSEC and to protect children (Roche & Flynn, 2021). Alongside improved criminal justice responses, a public health approach to child protection may have some merit in achieving this, which prioritises universal supports for families, while targeting intensive prevention of child maltreatment among vulnerable population groups, but also draws on statutory intervention where abuse or maltreatment does occur (Jenkins, 2021; Productivity Commission, 2021). This may be a policy approach that can fit the physical, social and economic contexts in which children live, and expand preventative efforts.

There are some important limitations of this review to note. Given the age of some of the studies included, their relevance can be questioned, particularly as OSEC and its characteristics evolve quickly with new technology. The review also includes research published in the grey literature, which is unlikely to have undergone peer review processes or been subjected to robust scrutiny of its design. It is also possible that relevant research has been published since this review was completed

(December 2021). Finally, some studies that were identified in the scoping review process examined child sexual abuse in the Philippines but did not provide information about the type or context of children's sexual abuse or exploitation, including whether there was an online element to it, and as such could not be included in the study. Future studies on sexual exploitation and abuse should explicitly note if an online context was present.

6. Conclusion

This scoping review offers new insights into the characteristics and circumstances around OSEC in the Philippines and details the limited body of research that informs current understandings of this significant issue. It draws attention to vulnerabilities arising from poverty and weak social protection, limited overall understanding of the harms of OSEC, as well as facilitative technology, social media and financial transaction systems as key drivers of OSEC in the context of the Philippines. The findings also highlight significant knowledge gaps, reflecting the need for future research to better understand the socio-cultural contexts that facilitate OSEC, the development of evidence-based practice and approaches to prevent OSEC, and stronger policy responses that can mobilise community-based child safety initiatives.

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CRediT authorship contribution statement

Steven Roche: Conceptualization, Supervision, Writing – original draft, Project administration, Methodology, Writing – review & editing. **Carmela Otarra:** Methodology, Writing – review & editing. **Imogen Fell:** Project administration, Writing – review & editing. **Christine Belle Torres:** Writing – review & editing. **Sydney Rees:** Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

No data was used for the research described in the article.

Appendix

(See Table A1).

References

- Anti-Child Pornography Act of 2009 (Republic Act No. 9775), S. 3, 14th Cong. (2009).
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- Australian Transaction Reports and Analysis Centre. (2019). *Combating the sexual exploitation of children for financial gain - Activity indicators*. <https://www.austrac.gov.au/sites/default/files/2019-11/Fintel%20Alliance%20-%20Indicators%20report%20-%20Combating%20sexual%20exploitation%20of%20children.pdf>
- Barrera, M., Calderón, L., & Bell, V. (2013). The cognitive impact of sexual abuse and PTSD in children: A neuropsychological study. *Journal of child sexual abuse*, 22(6), 625–638. <https://doi.org/10.1080/10538712.2013.811141>
- Batha, E. (2016, June 7). Internet providers urged to tackle live-streaming of child sex in the Philippines. *Reuters*. <https://www.reuters.com/article/us-philippines-internet-child-sexcrimes/internetproviders-urged-to-tackle-live-streaming-of-child-sex-in-the-philippines-idUSKCN0YT04W>
- Blakemore, T., Herbert, J. L., Arney, F., & Parkinson, S. (2017). The impacts of institutional child sexual abuse: A rapid review of the evidence. *Child Abuse & Neglect*, 74, 35–48. <https://doi.org/10.1016/j.chiabu.2017.08.006>
- Brown, R., Napier, S., & Smith, R. (2020). *Australians who view live streaming of child sexual abuse: An analysis of financial transactions* (Trends & Issues in Crime and Criminal Justice no. 589). Australian Institute of Criminology. <https://doi.org/10.52922/ti04336>
- Cashmore, J., & Shackel, R. (2013). *The long-term effects of child sexual abuse* (CFCA paper no. 11). Australian Institute of Family Studies. <https://aifs.gov.au/cfca/sites/default/files/cfca/pubs/papers/a143161/cfca11.pdf>
- Chakraborty, A., Daniel, M., Howard, N. J., Chong, A., Slavin, N., Brown, A., & Cargo, M. (2021). Identifying environmental determinants relevant to health and wellbeing in remote Australian Indigenous communities: A scoping review of grey literature. *International Journal of Environmental Research and Public Health*, 18(8), 4167.
- Collin-Vézina, D., Daigneault, I., & Hébert, M. (2015). Lessons Learned from Child Sexual Abuse Research: Prevalence, Outcomes, and Preventive Strategies, continued. In L. A. Prock (Ed.), *The Societal Burden of Child Abuse* (pp. 125–134). Apple Academic Press.
- Cubitt, T., Brown, R., & Napier, S. (2021). *Predicting prolific live streaming of child sexual abuse* (Trends and Issues in Crime and Criminal Justice no. 634). Australian Institute of Criminology. https://www.aic.gov.au/sites/default/files/2021-08/ti634_predicting_prolific_live_streaming_of_child_sexual_abuse.pdf
- Curato, N. (2017). Flirting with Authoritarian Fantasies? Rodrigo Duterte and the New Terms of Philippines Populism. *Journal of Contemporary Asia*, 47(1), 142–153. <https://doi.org/10.1080/00472336.2016.1239751>
- Davis, J. D., & Miles, G. M. (2019). “They Shamed Me”: An Exploratory Study on the Vulnerabilities of Street-Involved Boys to Sexual Exploitation in Manila, Philippines. *Dignity: A Journal on Sexual Exploitation and Violence*, 4(3). <https://doi.org/10.23860/dignity>
- Daly, M., Bray, R., Bruckauf, Z., Byrne, J., Margaria, A., Pecnik, N., and Samms-Vaughan, M. (2015). *Family and Parenting Support: Policy and Provision in a Global Context* (Innocenti Insights). UNICEF Office of Research. https://www.unicef-irc.org/publications/pdf/01%20family_support_layout_web.pdf
- Dedade-Escoton, V., Walker, S., Shurter, D., Moreno, E., Diaz, N., Silva, S. (2020). *A study on Online Sexual Exploitation of Children for Aftercare Reintegration*. International Justice Mission. <https://osec.ijm.org/documents/19/IJM-Aftercare-Reintegration-research-2021.pdf>
- ECPAT International. (2017). Online child sexual exploitation: An analysis of emerging and selected issues. *ECPAT International Journal*, 12, 1–63. http://ecpat.de/wp-content/uploads/2018/08/Journal_No12-ebook.pdf
- Europol. (2019). *Internet Organised Crime Threat Assessment 2019*. https://www.europol.europa.eu/cms/sites/default/files/documents/iocata_2019.pdf
- Gabel, S. G. (2012). Social protection and children in developing countries. *Children and Youth Services Review*, 34, 537–545. <https://doi.org/10.1080/21699763.2014.921233>
- Gill, M. (2021). Online Child Sexual Exploitation in the Philippines: Moving beyond the current discourse and approach. *Anti-Trafficking Review*, 16, 150–155. <https://doi.org/10.14197/atr.2012211610>
- International Justice Mission. (2020a). Online Sexual Exploitation of Children in the Philippines: Analysis and Recommendations for Governments, Industry and Civil Society. https://ijmstoragelive.blob.core.windows.net/ijmna/documents/studies/Final-Public-Full-Report-5_20_2020.pdf
- International Justice Mission. (2020b). *Falling Short: Demand-side Sentencing for Online Sexual Exploitation of Children*. https://osec.ijm.org/documents/4/FALLING_SHORT-Demand-side-Sentencing-Case-Review-October-2020.pdf
- Internet Watch Foundation (2018). *Trends in Online Child Sexual Exploitation: Examining the distribution of captures of live-streamed child sexual abuse*. <https://www.iwf.org.uk/sites/default/files/inline-files/Distribution%20of%20Captures%20of%20Live-streamed%20Child%20Sexual%20Abuse%20FINAL.pdf>
- Febro-Naga, J., & Tinam-Isan, M. A. (2022). Exploring cyber violence against women and girls in the Philippines through Mining Online News. *Comunicar*, 30(70), 125–138. <https://doi.org/10.3916/C70-2022-10>
- Gatwiri, K., McPherson, L., Parmenter, N., Cameron, N., & Rotumah, D. (2021). Indigenous children and young people in residential care: A systematic scoping review. *Trauma, Violence, & Abuse*, 22(4), 829–842. <https://doi.org/10.1177/1524838019881707>
- Glarino, G., & Davis, J. (2017). *Online Child Sexual Exploitation in the Philippines*. Terre Des Hommes & United Nations Children's Fund Philippines.
- Greijer, S., & Doek, J. (2013). *Terminology Guidelines for the Protection of Children from Sexual Exploitation and Sexual Abuse*. ECPAT International with ECPAT Luxembourg. <https://www.ecpat.org/wp-content/uploads/2016/12/Terminology-guidelines-ENG.pdf>
- Hernandez, S. C. L. S., Lacsina, A. C., Ylade, M. C., Aldaba, J., Lam, H. Y., Estacio, L. R., Jr., & 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). <https://doi.org/10.47895/amp.v52i4.352>
- Higgins, J. P., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J., & Welch, V. A. (Eds.). (2019). *Cochrane handbook for systematic reviews of interventions*. John Wiley & Sons.
- Jenkins, B. Q. (2021). The Analogy of Child Protection as Public Health: An Analysis of Utility, Fit, Awareness, and Need. *Social Services Review*, 210–246.
- Ju, B., Poveda, S., & Thinyane, H. (2022). From voiceless to voicing: The communication empowerment of sex-trafficking survivors by using participatory video. *Asian Journal of Social Science*, 50(1), 62–69. <https://doi.org/10.1016/j.ajss.2021.09.012>
- Kuhlmann, D. F., & Aurén, S. (2015). *Nipa Huts with High Speed Internet: Commercial Exploitation of Children in the 21st Century. A Qualitative Investigation of Webcam Child Prostitution in the Philippines* [Master's thesis, Lund University]. Lund University Libraries. <https://lup.lub.lu.se/student-papers/search/publication/5424968>
- Lau, M., & Bradshaw, J. (2010). Child Well-being in the Pacific Rim. *Child Indicators Research*, 3(3), 367–383. <https://doi.org/10.1007/s12187-010-9064-4>

- Lindert, J., von Ehrenstein, O. S., Grashow, R., Gal, G., Braehler, E., & Weisskopf, M. G. (2014). Sexual and physical abuse in childhood is associated with depression and anxiety over the life course: Systematic review and meta-analysis. *International Journal of Public Health*, 59(2), 359–372. <https://doi.org/10.1007/s00038-013-0519-5>
- Littell, J. H. (2008). Evidence-Based or Biased? The Quality of Published Reviews of Evidence-Based Practices. *Children and Youth Services Review*, 30, 1299–1317. <https://doi.org/10.1016/j.childyouth.2008.04.001>
- Martin, J., & Slane, A. (2015). Child sexual abuse images online: Confronting the problem. *Child & Youth Services*, 36(4), 261–266. <https://doi.org/10.1080/0145935X.2015.1092828>
- Merten, M. (2020). Tackling online child sexual abuse in the Philippines. *The Lancet*, 396, 747–748. [https://doi.org/10.1016/S0140-6736\(20\)31901-2](https://doi.org/10.1016/S0140-6736(20)31901-2)
- Munn, Z., Peters, M. D. J., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology*, 18(1), 143. <https://doi.org/10.1186/s12874-018-0611-x>
- Myers, W., & Bourdillon, M. (2012). Concluding reflections: How might we really protect children? *Development in practice*, 22(4), 613–620. <https://doi.org/10.1080/09614524.2012.673558>
- Napier, S., Boxall, H., & Teunissen, C. (2021). *Live streaming of child sexual abuse: An analysis of offender chat logs* (Trends and Issues in Crime and Criminal Justice no. 639). Australian Institute of Criminology. https://www.aic.gov.au/sites/default/files/2021-10/ti639_live_streaming_of_child_sexual_abuse.pdf
- National Center for Missing and Exploited Children. (2022). *CyberTipline*. <https://www.missingkids.org/gethelpnow/cybertipline>
- National Wages Productivity Commission. (2022). *Current Real Minimum Wage Rates*. Department of Labor and Employment. <https://nwpc.dole.gov.ph/stats/current-real-minimum-wage-rates/>
- Pappas, C., & Williams, I. (2011). Grey Literature: Its Emerging Importance. *Journal of Hospital Librarianship*, 11(3), 228–234. <https://doi.org/10.1080/15323269.2011.587100>
- Pells, K. (2012). 'Risky lives': Risk and protection for children growing-up in poverty. *Development in Practice*, 22(4), 562–573. <https://doi.org/10.1080/09614524.2012.672953>
- Pickering, C., & Byrne, J. (2014). The benefits of publishing systematic quantitative literature reviews for PhD candidates and other early-career researchers. *Higher Education Research and Development*, 33(3), 534–548. <https://doi.org/10.1080/07294360.2013.841651>
- Pinheiro, P. S. (2006). *World report on violence against children*. United Nations Secretary-General's Study on Violence against Children. <http://www.unicef.org/violencestudy/1.%20World%20Report%20on%20Violence%20against%20Children.pdf>
- Plan International. (2016). *Children and the Sex Trade in the Digital Age: A study on the commercial sexual exploitation of children in Metro Manila*. The Girls Advocacy Alliance. https://planinternational.org/uploads/sites/25/2022/02/final_children_and_the_sex_trade_in_the_digital_age.pdf
- Productivity Commission. (2021). *Enabling the public health approach to protecting children*. Australian Government. <https://www.pc.gov.au/research/ongoing/report-on-government-services/what-works/child-protection/what-works-protecting-children.pdf>
- Puffer, E., McDonald, K., Pross, M., & Hudson, D. (2014). *Webcam child sex tourism: An emerging global issue* [Podium presentation]. Research & Scholarship Symposium, Cedarville University, Ohio, United States. http://digitalcommons.cedarville.edu/research_scholarship_symposium/2014/podium_presentations/15
- Pulta, B. (2020, May 25). Online Child Exploitation Reports in PH Surge Amid Covid-19: DOJ, *Philippine News Agency*. .
- Ramiro, L. S., Madrid, B. J., & Brown, D. W. (2010). Adverse childhood experiences (ACE) and health-risk behaviours among adults in a developing country setting. *Child Abuse and Neglect*, 34(11), 842–855. <https://doi.org/10.1016/j.chiabu.2010.02.012>
- Ramiro, L. S., Martinez, A. B., Tan, J. R. D., Mariano, K., Miranda, G. M. J., & Bautista, G. (2019). Online child sexual exploitation and abuse: A community diagnosis using the social norms theory. *Child abuse & Neglect*, 96, Article 104080. <https://doi.org/10.1016/j.chiabu.2019.104080>
- Roche, S. (2020). Conceptualising children's life histories and reasons for entry into residential care in the Philippines: Social contexts, instabilities and safeguarding. *Children and Youth Services Review*, 110, 104820.
- Roche, S., & Flores-Pasos, F. (2023). Chapter 42: Protecting Children in the Philippines: A System Focused Overview of Policy and Practice. In *Oxford Handbook of Child Protection Systems*. Oxford University Press.
- Roche, S., & Flynn, C. (2021). Local child protection in the Philippines: A case study of actors, processes and key risks for children. *Asia & the Pacific Policy Studies*, 8(3), 367–383.
- Stoltenborgh, M., van Ijzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011). A Global Perspective on Child Sexual Abuse: Meta-Analysis of Prevalence around the World. *Child Maltreatment*, 16(79). <https://doi.org/10.1177/1077559511403920>
- Terre des Hommes. (2013a). Webcam Child Sex Tourism. Becoming Sweetie: a novel approach to stopping the global rise of Webcam Child Sex Tourism. <https://www.terredeshommes.org/wp-content/uploads/2013/11/Webcam-child-sex-tourism-terre-des-hommes-NL-nov-2013.pdf>
- Terre Des Hommes. (2013b). Fullscreen on View: An exploratory study on the background and psychosocial consequences of webcam child sex tourism in the Philippines. https://www.terredeshommes.nl/sites/tdh/files/uploads/research_report_2.pdf
- University of the Philippines Manila, The University of Edinburgh, Child Protection Network Foundation, & United Nations Children's Fund. (2016). *A Systematic Literature Review of the Drivers of Violence Affecting Children in the Philippines*. <https://www.unicef.org/philippines/media/501/file/National%20Baseline%20Study%20on%20Violence%20Against%20Children%20in%20the%20Philippines%20Systematic%20literature%20review%20of%20drivers%20of%20violence%20affecting%20children%20.pdf>
- United Nations Children's Fund. (2020). *National Study on Online Sexual Abuse and Exploitation of Children in the Philippines*. <https://www.unicef.org/philippines/media/2601/file/National%20Study%20on%20Online%20Sexual%20Abuse%20and%20Exploitation%20of%20Children%20in%20the%20Philippines%20-%20Executive%20Summary.pdf>
- World Vision. (2020). Community Perspectives on Online Sexual Exploitation of Children: A Study Examining Existing Knowledge and Awareness in Select Areas in the Philippines. https://www.worldvision.org.ph/wp-content/uploads/2021/05/OSEC_25May2021-compressed.pdf
- United Nations. (1989). *Convention on the Rights of the Child*. <https://www.ohchr.org/sites/default/files/crc.pdf>
- Wurtele, S. K. (2009). Preventing sexual abuse of children in the twenty-first century: Preparing for challenges and opportunities. *Journal of Child Sexual Abuse*, 18(1), 1–18. <https://doi.org/10.1080/10538710802584650>
- Yu, N. G. (2013). The role of social work in Philippine poverty-reduction programs: Ideology, policy and the profession. *Asia Pacific Journal of Social Work and Development*, 23(1), 24–34. <https://doi.org/10.1080/02185385.2012.759320>