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Preventing child sexual abuse: A systematic review of interventions and their efficacy in developing countries

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ABSTRACT

Background: Research on prevalence, risk factors, and prevention interventions for child sexual abuse has continued to focus on western and developed countries. Where country-level prevalence data or large-scale research exists, rates of child sexual abuse are consistently higher in developing and non-western countries than their western and developed counterparts.
Objective: We systematically reviewed research on the nature of child sexual abuse interventions in developing countries, the settings and populations included to identify types of child sexual abuse prevention initiatives being implemented in developing countries and their effectiveness.
Methods: Following PRISMA guidelines, we conducted a systematic search of six databases and identified eight studies to include in our analysis.
Results: Most empirically evaluated interventions in developing countries have focused on preschool and primary school-aged children. Most have focused on interventions delivered in educational settings, with a lack of focus on population-level interventions to prevent child sexual abuse. Researchers have used outcomes measuring knowledge or skills for young people in self-protection and help-seeking, not deployment of those skills, actual reduction in prevalence of CSA, or improvements in conditions of safety in organizational contexts.
Conclusions: If the focus on school-based strategies to prevent child sexual abuse continues in developing countries, a significant gap in knowledge of the efficacy of population-level interventions outside of school contexts, and consistency across the application of interventions will remain. Evaluations are needed that address the efficacy of broader government-led or whole-of-community prevention interventions to reduce actual prevalence of child sexual abuse, or that can link increased knowledge and skill with reduced victimization.

1. Introduction

Child sexual abuse (CSA) is a global social problem with growing research and media attention. Many researchers in developed countries have investigated prevalence rates (Mathews et al., 2016), risk and protective factors (Kaufman et al., 2016) and prevention strategies (Morley & Higgins, 2018) to mitigate the occurrence of CSA, particularly within the context of youth-serving organizations. Concern regarding the significant issue of CSA has begun to be echoed by research in developing and non-western low-to-middle income countries in recent years (Abeid, Muganyizi, Massawe, Mpembeni, Darj et al., 2015; Al-Saif et al., 2018; Plummer & Njuguna, 2009; Veenema, Thornton, & Corley, 2015). Although some authors refer to 'low-to-middle income countries', we use the term

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'developing countries', based on the nomenclature set out in the UN's country classification (United Nations, 2014).

The World Health Organization (WHO) defined CSA as:

> "…the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violates the laws or social taboos of society. Child sexual abuse is evidenced by this activity between a child and an adult or another child who by age or development is in a relationship of responsibility, trust or power, the activity being intended to gratify or satisfy the needs of the other person." (World Health Organisation, 2003, p. 75)

It is also widely accepted that the definition of sexual abuse includes both contact and non-contact forms of abuse (Kloppen, Haugland, Svedin, Maehle, & Breivik, 2016; Mathews & Collin-Vezina, 2017).

Numerous systematic reviews exist of research on topics related to CSA such as prevalence rates (Barth, Bermetz, Heim, Trelle, & Tonia, 2013; Pereda, Guilera, Forns, & Gomez-Benito, 2009; Stoltenborgh, Bakermans-Kranenburg, Alink, & van Ijzendoorn, 2015), risk factors (Putnam, 2003; Whitaker et al., 2008) and the effectiveness of different prevention strategies (Letourneau, Schaeffer, Bradshaw, & Feder, 2017; Walsh, Zwi, Woolfenden, & Shlonsky, 2018). These reviews, however, have largely focused on research conducted in developed countries. Therefore, our aim here is to focus on what research evidence is available about CSA prevention efforts in developing countries and identify implications for improving prevention efforts globally.

Many developing countries have begun implementing laws with local and international non-government organizations supporting the prevention of CSA. In recent years, developing countries have broadly adopted policies and laws that directly and formally address violence against children, including sexual abuse (United Nations, 2014). This has been achieved through national plans of action on children, the inclusion of children's protection from sexual violence in broad child protection initiatives, and the development of specific national agendas on violence against children (United Nations, 2014).

In recent years, more than 20 countries have adopted different types of action plans for children (United Nations, 2014). However, there are varying degrees of comprehensiveness with approximately 25 % of countries surveyed by the UN not fully adopting laws to protect children against all form of violence. Since 2006, Angola, Bolivia, the Dominican Republic, Ecuador, Kenya, Montenegro, Serbia, and South Sudan have adopted or amended their constitutions to include a prohibition on violence against children (United Nations, 2014). Regarding sexual violence, the United Nations (2014) noted that significant progress has been made in recent years on legislation against sexual abuse and exploitation of children. Of the 104 member states of the United Nations that responded to the UN's Global Survey (2014), 96 % highlighted that a prohibition on sexual exploitation of children—including prostitution—is in place. These initiatives are promising, considering the high prevalence rates of CSA in developing countries. However, a holistic approach to understanding the right policy mix for CSA is warranted. This systematic literature review of CSA in developing countries is the first step toward more research-informed and targeted policy development.

1.1. Effects of child sexual abuse

The effects of CSA have been found to be both immediate and long term. In childhood, researchers have identified effects including: cognitive impacts (Barrera, Calderon, & Bell, 2013) mental health including depression, anxiety (Olafson, 2014; Wurtele, 2009) and posttraumatic stress disorder, and suicidal ideation (Cashmore & Shackel, 2013; Fergusson, Boden, & Horwood, 2008). Long-term effects into adulthood include mental ill health (Amado, Arce, & Herraiz, 2015; Fergusson et al., 2008; Lindert et al., 2014) as well as detrimental impact on individuals' adult roles such as employment, parenting, education and relationships (de Jong, Alink, Bijleveld, Finkenauer, & Hendriks, 2015).

Despite the risk of child sexual abuse being lower for males than females (although not necessarily in institutions; see Quadara, Nagy, Higgins, & Siegel, 2015), the effects of CSA on men have been widely researched. One reason for this, apart from the need to understand the life-long effects of abuse for male survivors, is fears of a cycle of abuse based on the fact that the majority of adult child sexual offenders—and adolescents with harmful or concerning sexual behaviors—are male (Plummer & Cossins, 2018). These issues may be of more concern in developing countries that have patriarchal societal norms.

CSA has vicarious effects on families and communities (Blakemore, Herbert, Arney, & Parkinson, 2017), which could be exacerbated in societies that emphasize the needs of group members and place importance on interconnectedness between societal members over individual priorities due to the value placed on community engagement. Such life-long effects for male and female victims, coupled with concerning prevalence rates globally, indicates the need to have effective interventions, policies or strategies targeted at the prevention of child sexual abuse for both boys and girls in developed and developing countries.

1.2. Prevalence

Few countries have good prevalence data (Mathews et al., 2016). Where prevalence data do exist, they are usually expressed as a range, given the disparate definitions, methodologies, and data reporting mechanisms employed in studies. Many researchers, as well as international development organizations, also suggest that CSA rates are consistently underestimated due to the inherent challenges of disclosure and reporting (Kloppen et al., 2016; Radford, Corral, Bradley, & Fisher, 2013). Recent meta-analyses have estimated global rates of CSA to be between 7.6–7.9 % for boys and 18.0–19.7 % for girls (Pereda et al., 2009; Stoltenborgh et al., 2015).

Where data are available, a strong contrast exists between developed and developing countries in terms of prevalence data. Studies from developed countries show lower prevalence rates for boys and higher for girls, compared to developing countries. For

example, prevalence in Scandinavia is reported to be between 3 % and 23 % for boys, and between 11 % and 36 % for girls (Kloppen et al., 2016); in Japan – 4.1 % for boys and 10.4–60.7 % for girls for non-penetrative CSA (Tanaka, Suzuki, Aoyama, Takaoka, & MacMillan, 2017); and in the United States – 5.1 % for boys and 26.6 % for girls (Finkelhor, Shattuck, Turner, & Hamby, 2014). This considerable international variability may be explained (at least, in part) by gender differences in prevalence of CSA in the two key contexts in which it occurs: organizational vs. familial abuse. As Quadara et al. (2015) noted:

> 'Child sexual abuse occurring within institutional settings (including residential, care, education, sporting or religious organizations) generally see higher rates of boys being victims of abuse than girls; however, girls are victims of teacher-student sexual abuse at a higher rate than boys (Knoll, 2010; Moulden, Firestone, Kingston, & Wexler, 2010; Sullivan & Beech, 2004). Generally, sexual abuse committed by educators occurs at a similar rate globally.' (p. 8)

In recognition of the negative effects of segregated, institutional care and the benefits of family-based care, progressive de-institutionalization of many care environments in western countries has occurred, such as home-based services to replace psychiatric institutions and segregated homes for children and adults with disability and mental illness (e.g., see: Torrey, 1997) and the development of foster care and kinship care in the child protection system to replace children's orphanages (Innocenti Research Centre, 2003). Given such institutional care for children has been associated with high levels of neglectful and abusive behaviour - including child sexual abuse, this might then lead to a different gender mix in overall prevalence of CSA in developed compared to developing countries.

Based on the limited research that does exist, prevalence rates in developing countries paint a poorer picture than is the case for developed/western countries. For example, Croatia has an overall prevalence of 10.8 % (Ajduković, Sušac, & Rajter, 2013). Rates are even higher for countries in Asia, Africa and South America, with rates of 14 % in Saudi Arabia (Al-Eissa et al., 2015), between 16.4 % (Zolotor et al., 2009) and 53.2 % (Kacker, Varadan, & Kumar, 2007) in India, 27 % in Colombia, 30.6 % in Russia (Zolotor et al., 2009), and 13 % for boys and 28 % for girls in Tanzania (Abeid, Muganyizi, Mpembeni, Darj, & Axemo, 2015). In some cases, these rates may be comparable to data from developed countries, however data from developing countries are often not able to be disaggregated by gender. In other cases, there is distinct and concerningly higher rates in many developing and non-western low-to-middle income countries, which has led to investigations of not only shared risk factors globally, but also specific cultural and contextual risk factors in these localities.

1.3. Risk factors

Although much of the research on risk factors has occurred in developed western countries, similar factors have been identified across a range of developing countries, including Indonesia, Pakistan and many African countries (Ali, Ali, Khuwaja, & Nanji, 2014; Bridgewater, 2016; Meinck, Cluver, Boyes, & Mhlongo, 2015; Rumble et al., 2018). In addition to the general risk factors associated with CSA (see Kaufman et al., 2016; Putnam, 2003), developing countries face specific risk factors due to their context. These contextual differences are associated with the strong community-centric thinking of many societies in developing countries (Meinck, Cluver, Boyes, & Loening-Voysey, 2016; Plummer & Njuguna, 2009), and the economic situations faced by individuals, families and communities (World Health Organization, 2010). Research suggests these contextual risk factors play a more significant role in the risk of CSA occurring than the individual or family-level factors prominent in both developed and developing countries (Plummer & Njuguna, 2009). These contextual risks include the patriarchal nature within communities (Whitehead & Roffee, 2016), stereotyped and discriminatory gender norms (Bridgewater, 2016), and the perceived role of children within tribal communities (Plummer & Njuguna, 2009). Exacerbation of risk factors as a result of the absence of governance processes, the absence of screening mechanisms to identify those who have already offended against children, and poor adult-child supervision ratios (Royal Commission into Institutional Responses to Child Sexual Abuse, 2017) provide additional credence to the higher prevalence rates in developing countries.

1.4. Prevention

A recent shift in how to address the issue of child sexual abuse has seen an increase in the desire to prevent abuse before it occurs, rather than focus on better responses once CSA has already occurred, in order to reduce the likelihood of harm and ongoing trauma (Letourneau et al., 2017; Levine & Dandamudi, 2016). This shift has required an investigation into how those outside of law enforcement (responsible for responding after CSA has occurred), can play a role in preventing abuse from occurring in the first place.

CSA has been widely cited as a public health problem (Letourneau, Brown, Fang, Hassan, & Mercy, 2018; Mathews, 2017). Numerous researchers have suggested that population-level prevention initiatives (i.e., a public health approach) are the best way to prevent CSA, including researchers from both English-speaking western countries (Letourneau, Eaton, Bass, Berlin, & Moore, 2014; McMahon & Puett, 1999), and developing countries (Skeen & Tomlinson, 2013; Veenema et al., 2015). Public health approaches recognize that prevention occurs at three levels: Primary (before it occurs); secondary (when risks are evident); and tertiary (after harm has occurred, to ameliorate its impact and prevent future harm) (Quadara et al., 2015). Due to the community- and macro-level approaches utilised in public health approach models, it is often led at the governmental or national level (Herrenkohl, Lonne, Scott, & Higgins, 2019). However, WHO (2015) noted that no national plans to prevent CSA existed across South East Asian countries, raising questions as to whether any population-level initiatives were being applied in developing countries.

The 'target' of primary CSA prevention activity can range from individuals through to whole-of- community interventions. Interventions such as delivery of CSA prevention education (or protective behaviors programs (Quadara et al., 2015) are focused on

the individual knowledge and skill of children and young people: to understand their bodies, their right to safety and how to seek help if confronted with concerning or abusive behaviour at the earliest possible opportunity. On the other hand, community-level prevention initiatives such as parent-education strategies are typically large-scale government-led initiatives reaching much larger audiences. To complement the focus on the knowledge, attitudes and skills of individuals, more recently, there has been a stronger focus on situational and cultural risk factors in youth-serving organizations and other community settings (Kaufman, Erooga, Higgins, & Zatkin, 2019; Morley & Higgins, 2018).

Prevention initiatives need to be comprehensive, considering not only the broad range of risk factors, but also the potential sources of protective strategies. Although there is good evidence for the effectiveness of prevention strategies to address other forms of familial child maltreatment (such as home-visiting during the prenatal/infancy period – see Holzer, Higgins, Bromfield, Richardson, & Higgins, 2006), there is no available evidence to show that such generic family support initiatives are effective at preventing CSA. Prevention initiatives also need to be targeted to the unique risks for CSA. As well as strategies to increase skills, awareness and obligations of individual children/young people and their parents/caregivers, safety concerns also need to be addressed at a macro-societal level. These strategies should be focused on (a) equipping large numbers of young people with skills to resist thus increasing the effort required of offenders to engage in offending behavior; (b) training adult workers who work in youth-serving organizations to better understand the risk factors and signs and how to implement situational risk mitigation to address prevent or interrupt grooming behaviour; and (c) increasing obligations surrounding reporting of child sexual abuse and those who engage in potentially grooming behavior (e.g., see: https://www.education.vic.gov.au/school/teachers/health/childprotection/Pages/expolitationgrooming.aspx).

Systematic reviews of prevention methods in western and developed countries, such as that by Walsh et al. (2018), have continued to support the development of programs and strategies to prevent child sexual abuse within these countries. Training programs such as the *Child Abuse School Liaison* program (Hanson et al., 2008) and the *Enough! Preventing Child Sexual Abuse in My School* online training program (Gushwa, Bernier, & Robinson, 2018) have shown positive results in improving knowledge and skills related to preventing child sexual abuse. Whether such improvements in knowledge lead to reduction in actual occurrence of child sexual abuse is debated in the literature (Walsh et al., 2018). With the identification of specific contextual risk factors in developing countries, some researchers have begun looking at the effectiveness of prevention methods at the individual country level in developing and non-western countries. We are not aware of any existing review of evaluations of CSA prevention strategies being applied in developing countries. However, knowledge of what prevention strategies are available—and their effectiveness in preventing CSA—is needed to support the work of researchers, practitioners and policy makers wanting to improve the safety and wellbeing of children and young people globally.

Many western countries have had formal inquiries and government reviews, and in response, many prevention activities have been implemented (through regulation by government, as well as voluntarily by organizations) and the nature of youth-serving organizations having changed radically through a major process of de-institutionalization of disability and child welfare services (Innocenti Research Centre, 2003; Torrey, 1997). It is important now to see what the application of these lessons might be for developing countries where there may not have been government-led review of system failures, and where a greater proportion of the population of children are spending time in institutional care of the kind subject to these inquiries.

Our aim is to systematically review the available evidence on the effectiveness of CSA prevention strategies in developing countries. The research question that guided the analysis is: What type of sexual abuse prevention interventions or initiatives are being implemented in developing countries, and are they effective?

In conducting this review, our aim is to better understand the types of prevention strategies that effectively support individuals, organizations and communities in these countries. We hope to highlight best practice, knowledge gaps, and implementation gaps (where we may have good evidence of effectiveness, but limited take-up of interventions) in relation to prevention of CSA, and to identify implications for how best to support the safety of children and young people in developing countries from sexual abuse.

2. Method

To guide the systematic review, we developed an internal protocol, based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria (Moher et al., 2015). (Available by emailing the corresponding author.)

2.1. Search strategy

Electronic database searches were conducted in May 2018 to identify relevant English language, peer-reviewed published

Table 1
List of search terms.

Sexual Abuse	Child	Prevention	Developing Countries
"sexual* abuse*" OR pedophil* OR paedophile* OR "sexual* assult*" OR rape*	Child* OR Adolescen* OR Teen* OR Youth*OR "school aged" OR "young people" OR pre-school	Prevent* OR deter*	("developing countr*" OR "emerging economy*" OR "third world" OR "underdeveloped countr*" OR [a][List of developing countries – See Supplementary Table 1])

[a] See Supplementary Table 1 for additional terms used in developing countries field.

literature. The databases searched included: Scopus, Web of Science (Core Collection), PsycINFO, ERIC, MEDLINE and the Social Sciences Index. No date restrictions were used in order to capture as many studies as possible within the search parameters. Table 1 outlines the terms we included in our keyword searches. Where possible, we also conducted subject heading (index) searches.

2.2. Inclusion and exclusion criteria

Articles were included if they: (1) included an intervention, program, training or educational strategy to support the prevention of sexual abuse or assault; (2) investigated the efficacy of the intervention by measuring changes in (a) knowledge, (b) attitude, (c) perceptions, or (d) safeguarding practices, or the number of child sexual abuse reports made; (3) measured the outcome relevant to (a) children and young people and/or (b) staff or volunteers working with young people; and (4) were conducted in a developing country, as defined by the International Statistical Institute (n.d.). Our search strategy focused on English-language databases and publications – although we did screen articles in Spanish, in which one co-author was fluent.

Articles were excluded if they simply discussed the prevalence of child sexual abuse, investigated risk or protective factors related to child sexual abuse within a specific context (but with no reference to an intervention or prevention strategy), or if the prevention strategy or intervention was aimed at child maltreatment in general and did not have elements specific to sexual abuse. The search strategy did not specifically target grey literature.

2.3. Study selection

See Fig. 1 for an overview of the search process. Initial searching resulted in 2,639 articles, of which 974 were duplicates. Authors 1 and 3 double-blind screened the remaining 1,665 articles using Rayyan QCRI Ouzzani, Hammady, Fedorowicz, & Elmagarmid, 2016), with any disagreement referred to Author 2 for a final decision. This process resulted in 20 articles included for data extraction. Of the 20 full-text papers retrieved for data extraction, two were pilot or introductory papers leading to the retrieval of 6 additional papers through searching for additional papers or contacting the corresponding author. Of these 26 papers, five were included in the final data analysis after applying the inclusion and exclusion criteria.

Two additional papers were found while searching for material for the introduction to this review, and a third paper was suggested by an anonymous reviewer upon submission of the manuscript for publication. Since these papers met the inclusion criteria, they were included. The final analysis included eight studies.

2.4. Analysis plan

In analyzing the eight studies included in this review, as well as considering the results of each study, we focused on the methodology and design, study characteristics (including year and size of study), sample population (age, gender etc.), and the country of research. Data were extracted using an Excel spreadsheet based on the Cochrane Public Health Group Data Extraction and Assessment Template. Using these data, indirect comparisons—where interventions used in separate studies are compared—were made, to identify what types of interventions/initiatives/strategies are being used in developing countries to prevent CSA and how effective these interventions are when considering the outcomes measured in each individual study.

3. Findings

3.1. Overview of studies

Two studies were from Africa, five were from Asia and one from Latin America. All the studies reviewed used a quantitative methodology using quasi-experimental or experimental designs. Three studies were large-scale (over 500 participants), whereas the remaining six were small-scale studies. Only one study (Citak Tunc et al., 2018) made reference to any funding provided for the research, which was provided by a university scientific research projects management unit. This is not to say the other research, or indeed interventions weren't provided funding, but this was not explicitly stated within the research articles. All but one study included both male and female participants. Across the studies, interventions were implemented by a range of people including; teachers, nurses, trained facilitators, and children/young people themselves. We now describe which group(s) of participants were the focus of attention within the studies, the types of interventions, and whether they were focused on evaluating efficacy of those interventions.

3.2. Participants

As can be seen in Table 2, most research on interventions to support the prevention of child sexual abuse in developing countries has been focused on younger children: either in primary school (Dunn, 2011; Fitriana, Suryawati, & Zubaidah, 2018; Hurtado, Katz, Ciro, Guttfreund, & Nosike, 2014; Neherta, Machmud, Damayanti, & Afrizal, 2017) or pre-school (Citak Tunc et al., 2018; Zhang et al., 2014). One study focused on increasing the sexual abuse prevention knowledge of children living with a disability (Kucuk, Platin, & Erdem, 2017). One evaluated a program that supported women and children at risk of sexual abuse (Sinclair et al., 2013).

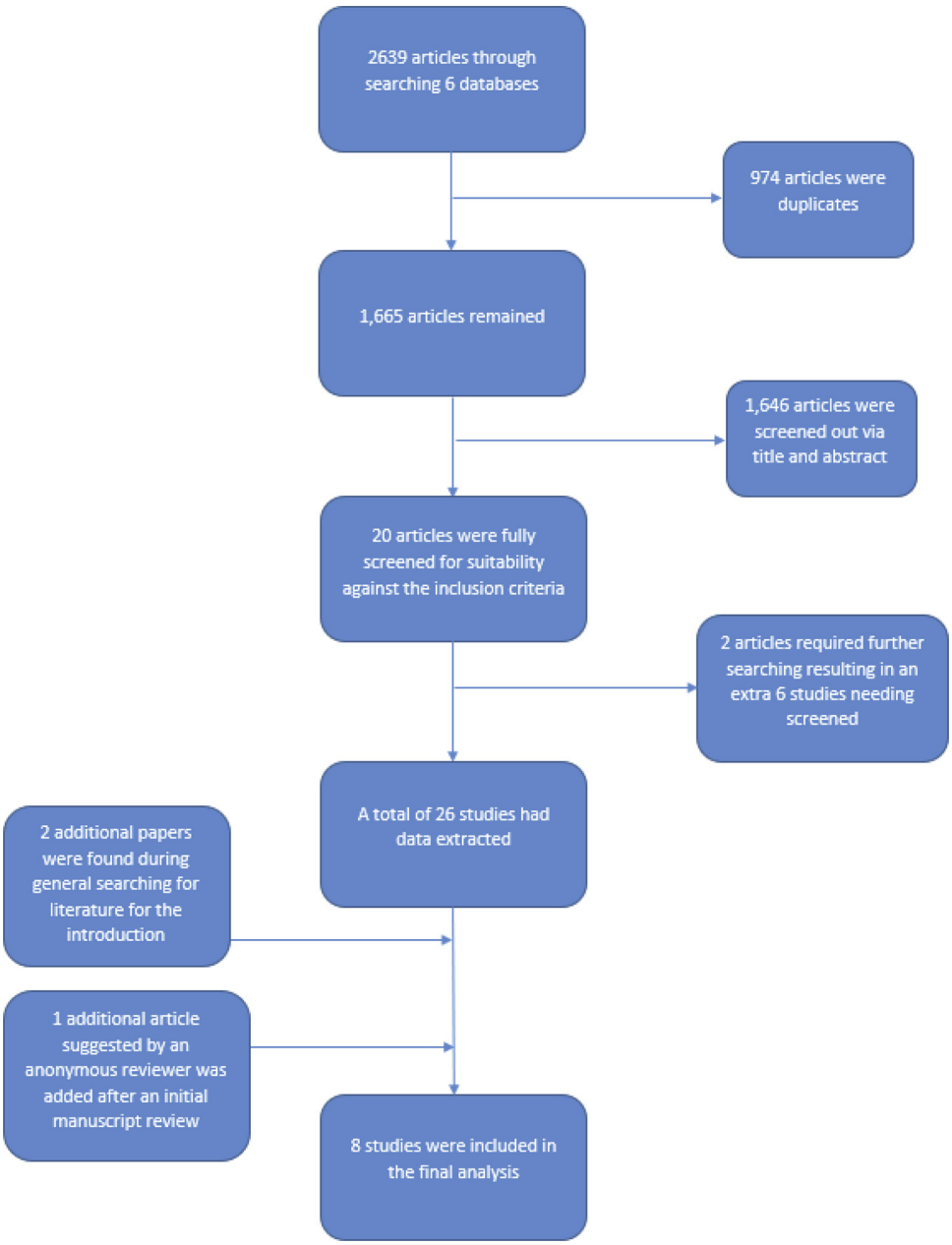

Fig. 1. PRISMA flow diagram of screening process.

3.3. Types of interventions

Most of the interventions used within the studies included in this review focused on improving children's knowledge of what constitutes appropriate and inappropriate touching and self-efficacy to act (i.e., to speak up and seek help) if—hypothetically—they were exposed to an abusive behaviour. Many of these educational interventions included the use of story books and other developmentally appropriate materials. One study focused on improving self-defense capabilities in young people, and three utilized one of two intervention programs developed overseas (in western countries).

Within the literature included in this review, there was evidence of only one investigation into the efficacy of a large-scale, government-led intervention to prevent CSA in a developing country (Dunn, 2011). Similarly, there was little evidence of interventions that went beyond just increasing knowledge and/or skills of children and young people regarding how to stay safe from potential abuse. Such studies have been questioned in relation to whether they contribute to a decrease in actual CSA victimization, not just an increase in knowledge or skills (Walsh et al., 2018). What was evident through this review was the efforts by researchers to use strong methodologies such as experimental and pre-post intervention measurement designs, to a focus on measurement of

Table 2
Papers meeting criteria for inclusion (n = 8).

Author(s) & date	Country	Method	Sample type, size and gender	Children details	Intervention	Key findings
Dunn (2011)	South Africa	Experimental	Purposive, n = 1,697, Female = 47.4%	Attending grade 4, aged 9–12 years old, children had taken part in the HOOC campaign (See paper for details)	Hands Off Our Children (HOOC) Campaign: Ministerial initiative with several intervention strategies. This paper focused on the school-based program which included a HOOC board game.	The study described a state-level public health initiative to improve child sexual abuse prevention at the primary school level with young children. The board game significantly improved knowledge regarding appropriate and inappropriate touch
Kucuk et al. (2017)	Turkey	Pre-post design/ quasi-experimental	Convenience, 15 children, Female = 60 %	Aged between 10 and 14, had a mild intellectual disability and attended a child rehabilitation center.	4 story books were developed using the Stein and Glen Story Map Method (Stein & Glen, 2979). These were read in lessons to the children. Additionally, reading the stories three times at home was also given as a homework task.	Stories were used in special educational settings to teach children about body parts, saying no, and telling a trusted adult. The intervention was developed specifically for young people with mild intellectual disabilities. With reinforcement through homework, the stories were effective in increasing knowledge.
Neherta et al. (2017)	Indonesia	Quasi-experimental	Not stated, n = 1112 children, Female = 44.9%	Aged between 6 and 12 (M = 9.5),	The intervention was labeled as a 'knowledge increasing program' using visual, auditory and kinesthetic learning modalities. Four sessions occurred over a period of 7 weeks.	The intervention used a variety of learning media, such as movies, role plays, discussion using stories, local songs, and leaflets. The intervention was used in primary schools (Grades 1–6). Both teachers and nurses were able to implement the program and improve knowledge and assertiveness. The intervention group led by nurses was more effective than that by the teachers.
Sinclair et al. (2013)	Kenya	Experimental	Purposive, n = 522 girls.	Aged between 14 and 21 (M = 16.7)	No means no worldwide: A manual-based intervention developed over 3 years. Developed in U.S and Europe aiming to reduce sexual violence against women. Six 2 -h sessions including practicing self-defense use of voice, faking compliance.	This intervention was a self-defense program aimed at improving verbal and physical protective strategies of women and children at high risk of rape. The intervention was able to reduce the annual incidence of sexual assault by 62.6 % over a 10-month period.
Zhang et al. (2014)	China	Experimental	Not stated, n = 150 preschool children, Female = 50.6%	Aged between 3 and 5 (M = 4.10)	The Body Safe Training (BST) Program (Wurtele, 2007). The program consists of several stories accompanied by pictures of children in unsafe situations where someone tries to touch a child. Delivered in five sessions, each ranging from 15−25 min on five consecutive days.	The BST program is an educational program aimed at teaching personal safety skills from a behavioral perspective. This study investigated the interventions effectiveness with preschool children aged between 3 and 5. Preschoolers who participated in the CSA prevention training program had significantly higher levels of knowledge about sexual abuse and scores on their skills that may be helpful in avoiding sexual abuse

(*continued on next page*)

Table 2 (*continued*)

Author(s) & date	Country	Method	Sample type, size and gender	Children details	Intervention	Key findings
Fitriana et al. (2018)	Indonesia	Quasi-experimental	Purposive, n = 84 children, Female = Not stated	Grade 4 and 5 students. M age = 10.95, SD = 0.88 (Intervention); M age = 10.86, SD = 1.00 (control)	The intervention involved peer education. Sessions were taught over 2 weeks with each session lasting 25 minutes. Education by peers used discussion methods and playing games. The media used included flipcharts, sexual violence prevention videos, card games, a snake and ladders game, and drawing.	A school-based education intervention taught by peers as opposed to by teachers or other professionals. Primary school aged children; fourth and fifth grade. Education by peers has an influence on the knowledge of school-aged children in relation to sexual abuse prevention.
Citak Tunc et al. (2018)	Turkey	Experimental	Random, n = 83 children, Female = 36.1%	M age = 57 months, SD = 9.07	The Body Safe Training (BST) Program (Wurtele, 2007). The program consists of several stories accompanied by pictures of children in unsafe situations where someone tries to touch a child. Authors reported the intervention was delivered in preschools in 10 sessions, each ranging from 20−25 min on seven consecutive days.	The BST program is an educational program aimed at teaching personal safety skills from a behavioral perspective. This study sampled preschool children aged between 3 and 5. Children's self-protection skills and recognition of appropriate and inappropriate touch increased in the intervention group.
Hurtado et al. (2014)	El Salvador	Pre-post design/ quasi-experimental	Not stated, n = 189 pre-visit, n = 59 post-visit.t		The Tin Marin's Children's Museum CSA exhibit addresses issues regarding body ownership, types of inappropriate touching, and escaping and reporting skills. The exhibit was part of a campaign initiated by the Salvadoran government and several NGOs. The exhibit was interactive; children played along the way and watched and discussed a video with a trained museum guide.	Children's knowledge scores on CSA prevention significantly improved after visiting the exhibit ($P < .012$).

outcomes.

3.4. Outcome measures

Of the eight studies reviewed, four used psychometrically sound outcome measures. These measures included the "What if" Situations Test (Wurtele, Hughes, & Owens, 1998), the Personal Safety Questionnaire (Wurtele, Gillispie, Currier, Franklin, & Neglect, 1992) and the Children's Knowledge of Abuse Questionnaire-Revised (Tutty, 1995). Sinclair et al. (2013) was the only study we identified that used incidence rates in both an intervention and control group to measure the reduction in sexual abuse as a result of the intervention being tested, while the remaining studies used their own outcome measure developed for the study, with no reporting on reliability or validity of the measure.

4. Discussion

The aim of this systematic review was to understand the state of primary prevention strategies being used and evaluated in developing countries. We identify the nature of child sexual abuse prevention strategies and interventions in developing countries, understand the typical settings and population groups in which intervention strategies are being used, to investigate the effectiveness of the interventions used.

4.1. Nature of prevention policies and interventions

In the few interventions outlined in the research papers included in this review, most prevention work is targeted at the local level, typically in education settings for children at pre-school and primary school. These interventions focused on improving children's understanding of their bodies, appropriate and inappropriate touch, and who they could reach out to if they have concerns about someone's behavior. Given the reach of school systems, these interventions could be classified as being based on a public health approach to primary prevention (Herrenkohl et al., 2019). Numerous researchers (Letourneau et al., 2014; Quadara et al., 2015) have discussed the importance of utilizing a public health approach to prevent child sexual abuse. As it involves both policy setting and community-wide activities (such as awareness raising and behavior change strategies), public health strategies are typically led at the national or state government level. Of the studies included in this review, only one study was a government-led intervention (Dunn, 2011).

Two studies (Citak Tunc et al., 2018; Zhang et al., 2014) focused on an intervention—the Body Safety Training Program—developed in the US in the mid-1980s, and revised in 2007, and which has been tested for efficacy when compared to control groups and other intervention options (see: (Wurtele, Saslawsky, Miller, Marrs, & Britcher, 1986; Wurtele, Kast, Miller-Perrin, & Kondrick, 1989). Both studies discussed the translation of the program into the respective language of the participants—Mandarin and Turkish—using psychologists, educators and other experts to support the translation of either the entire program or the key titles. The use of 'western' interventions in developing countries comes with advantages and disadvantages. On the one hand, these programs have often been evaluated in experimental trials and been found to enhance knowledge about sexual abuse and protective skills. On the other hand, it is yet to be investigated whether sexual abuse prevention programs developed and shown to be efficacious in one cultural or social context can be as effective in a different cultural or social context.

Considering the use of Body Safe Training Program—a western-developed, local-level intervention—in these two studies, it is reasonable to consider that an expansion of interventions in developing countries could include western-developed community and societal-level interventions. Already there has been efforts to introduce child maltreatment prevention strategies from western-developed countries such as parent education and early home visiting; however these were not identified through our literature search (because they are broader in their goals and not designed to specifically to prevent CSA, and no data exist to demonstrate their efficacy at reducing the risk of CSA). These kinds of societal and community-level interventions would most likely be based on government-led prevention policies in developed countries but would have to take into consideration the cultural factors relevant to the context in which interventions were being implemented.

4.2. Typical settings and population groups

Although the eight studies reflected a variety of intervention types, specific information was not always available. Where it was, school-based interventions or interventions delivered by teachers were the most common. This trend has been previously noted within the wider literature (Letourneau et al., 2014). Evidence of the effectiveness of school-based interventions aimed at preventing CSA—largely in developed countries—has been identified through a recent systematic review (Walsh et al., 2018). However, Walsh et al. questioned whether children's gains in knowledge and skills translates to an actual reduction in CSA. This has implications for developing countries where not all children are in school. The out-of-school rate in primary school-aged children in low-income countries is 20 % relative to 3 % in their high-income counterparts; the lower secondary out-of-school rate is 38 % and 2 %, respectively. Of children not attending school globally, approximately 84 % are from developing countries (UNESCO, 2018). Vulnerable groups, such as poor girls, are more likely to be out of school (Mertaugh, Jimenez, & Patrinos, 2009). Thus, there is agreement that a public health model, including population-level prevention strategies and a situational prevention approach, would be better placed to improve prevention of child sexual abuse across different settings (Kaufman, Erooga, Higgins, & Zatkin, 2019; Quadara, 2019). However, we did not identify any population-level interventions within the search parameters of this review. With so few

studies meeting the criteria we set, concern regarding the effectiveness of programs to reduce the high rates of CSA in developing countries is warranted.

Most interventions in developing countries appear to focus on very young children. The development—and empirical investigation—of interventions aimed at pre-school aged children is warranted considering the research showing that children under the age of seven constitute a significant proportion of CSA victims (Finkelhor, 1984). The intervention most used in developing countries for children this age identified in our review is the Body Safety Training program (Wurtele et al., 1986), evaluated by two of the papers (Citak Tunc et al., 2018; Zhang et al., 2014).

We were not able to uncover any peer-reviewed evaluation work conducted by any NGO in this review. Despite many international aid and development agencies recognizing the importance of child protection in their work, it was surprising to see no published evaluations of the efficacy of such programs. This could be because assessing outcomes (as opposed to delivering initiatives) is not as highly valued, the difficulties in translating evaluation results for peer-review publication, or the general challenges of outcome evaluation designs makes such an activity very difficult.

4.3. Intervention efficacy in developing countries

Overall, the studies provided a positive picture about the effectiveness of the interventions in increasing abuse prevention knowledge and—when tested—the self-efficacy of children and young people to take protective action should they encounter an unsafe situation. All six studies that measured knowledge and/or skills showed significant improvements in participants' capabilities. The evidence suggests that interventions that aim to improve young people's knowledge and/or skills regarding keeping themselves safe can be successful in that goal; however, researchers have not gone further to measure whether that increased knowledge and/or skill in the longer term leads to a decrease in sexual abuse victimization as a result. Such evidence would be difficult to obtain without strong existing country or regional prevalence data, or at least incidence data for CSA reported to authorities, against which to compare. Considering the average delay between abuse and disclosure of CSA is estimated to be in the order of 20 years (Royal Commission into Institutional Responses to Child Sexual Abuse, 2017), this is a significant barrier to comprehensive evaluation of current prevention efforts. The studies included in our review give evidence that a range of individuals—both professional and peers—can support the improvement of sexual abuse prevention knowledge in young people. As prevalence and incidence are notoriously difficult to measure in relation to child sexual abuse (Mathews et al., 2016), it is perhaps not surprising that only one study within the scope of this review used incidence rates to measure success (Sinclair et al., 2013). Incidentally, in that study, rates of sexual abuse dropped significantly as a result of the intervention. In the 10 months following participation in the program, sexual assault incidence rates showed a statistically significant reduction within the intervention group of 15.4 %. The control group saw no change in incidence rates across the same time. Verbal defense skills were identified as the first skill learned, followed by physical self-defense skills. The authors attributed the decline in incidence for the intervention group to this. They acknowledged that if CSA did occur, the intervention group would also be more likely to disclose that assault had occurred, noting that this opened the door to potential support and intervention (Sinclair et al., 2013).

The results from developing countries confirm what has also been shown in developed countries: that prevention strategies focused on knowledge can effectively increase the sexual safety knowledge and skills of young children. However, there is a lack of evidence that supports the link between an increase in knowledge and a decrease in incidence of CSA (Walsh et al., 2018). This lack of evidence is not because of a lack of data to show no relationship, but because of the absence of an agreed 'proxy outcome' measure and the difficulty in tracking actual incidence of CSA, particularly in the absence of national prevalence or representative surveillance data on sexual abuse incidence in most countries. The challenge of attributing direct outcomes to prevention-oriented policies and interventions apply equally in developed and developing countries (Mathews et al., 2016).

Seven of the eight studies focused on acquisition of knowledge and/or skills as the primary outcome measure. Only one evaluation (Sinclair et al., 2013) looked at the implementation of that knowledge, the confidence and self-efficacy of participants to take action based on knowledge/skill, or other emotional factors that might influence implementation of the knowledge gained. Few studies followed-up with participants. One study (Dunn, 2011) that measured knowledge gains conducted follow-up tests after six weeks. The study that measured disclosures of child sexual abuse and rape (Sinclair et al., 2013) collected post-intervention data after 10 months. Other than these follow-up procedures, there were no follow-up studies that examined the retention of knowledge, use of skills or changes in confidence over time.

4.4. State of knowledge of CSA primary prevention activities in developing countries

The number of experimental or quasi-experimental designs is a major strength of the approach being taken by researchers in developing countries to evaluate the effectiveness of interventions aimed at preventing CSA. Most of the studies had random allocation to intervention and control groups, with some utilizing a pre-post evaluation design, measuring the intended outcomes both before and after intervention. One of the key weaknesses of the research we identified is the lack of comparative analysis of two or more programs, using the same implementation protocol and outcomes evaluation strategy. Currently, no data exist to suggest what works better. All that can be said, given the range of specific intervention programs, is that prevention knowledge and skills *can* be taught and achieve statistically significant increases in children's knowledge of sexual abuse prevention concepts in developing country contexts, as has been seen in western English-speaking research on school-based interventions. A second key weakness is the lack of outcome variables measured in research investigating CSA prevention strategies. Most research regarding the efficacy of interventions has focused on the increase of children's prevention knowledge and skills. Investigation into the conditions of safety

that support a situational crime prevention approach to preventing child sexual abuse could be gained by measuring additional variables such as children's perceptions of safety within settings where abuse can potentially occur (Moore, McArthur, Heerde, Roche, & O'Leary, 2016), the safeguarding capabilities of staff and volunteers working with children and young people (Russell & Higgins, 2019, 2020), or parent, carer, and family empowerment and awareness of CSA prevention being used in organizations and within the community.

5. Conclusion

Safeguarding children from CSA has continued to receive increasing attention globally due to high incidence and prevalence rates. While developed countries such as the US, Australia and countries across Europe have 40 years' experience researching and developing interventions to prevent CSA, developing countries have only seen empirical evaluation of the effectiveness of such interventions in the past decade. Although data are limited, as developing countries appear to have higher prevalence of CSA compared to developed and western countries, it is heartening to see that school-based prevention interventions can result in increased knowledge and skills for children in these countries. Despite the importance assigned to safeguarding activities by international aid organizations, however, there is scant evidence in English language peer-review journals of rigorous quality evaluations of the policies and related intervention strategies they can—or do—employ when working in developing countries.

Although there are considerable efforts internationally to prevent CSA that exist, however, they have not been subject to empirical evaluation and the findings published in peer-review journals. The sizeable gap between the prevention efforts, and the formal research evaluating their effectiveness suggests an area of focus for funding and further research efforts to understand whether and how such prevention initiatives are (or are not) effective in their goal of preventing CSA in developing and non-western low-to-middle income countries.

Considering the global scale and growing interest in addressing the problem of CSA, it is disappointing to have not found more evidence of large-scale government-led initiatives to combat this abuse in developing countries. Compared to developed nations, few evaluations of government-led initiatives, or institutional standard practices such as curriculum, have been undertaken in developing countries. It is a given that individual nations hope to make a difference and reduce CSA, but further work—and the requisite funding—is needed to apply a rigorous public health approach with an evaluation component. Most programs being evaluated in developing countries were isolated interventions or programs. Although there are some limited local, school-level programs in developing countries, even in that context, we did not find reference to there being an overarching public health or system-level model behind the interventions on which teaching about prevention of sexual abuse can be based at a whole-of-population level. We found no evaluation of a national or regional initiative, or of an integrated prevention framework in a developing country.

There was relatively poor geographical coverage of evaluative research regarding CSA prevention, with no international comparisons undertaken. No evaluations were published from South America; North Africa, Pacifica, or the Middle East. Given our systematic search of multidisciplinary databases found so few eligible studies, research into CSA prevention in developing countries and evaluation of interventions is a global need. For prevention strategies to effectively support individuals, organizations and communities in developing countries, more rigorous evaluations need to be conducted and reported, so that the international community can identify best practice for implementation.

6. Implications

To support local-level activities in developing countries aimed at reducing CSA, the accessibility of primary prevention programs should be a focus of governments and non-government organizations operating in developing countries (who are funded directly by governments, international aid agencies, and overseas donors). Country-wide policies/programs are needed, supported by partnerships with research experts to conduct evaluation research on their prevention efforts – whether they be at community or societal levels. As is the case in dealing with related areas of interpersonal violence, such partnership activities between international agencies and governments must also recognize and promote equality and the human rights of women and children, which underpin many of the intervention activities.

CSA-specific prevention also needs to be situated within the context of child maltreatment prevention more broadly, from a public health perspective (Herrenkohl et al., 2019). By recognizing the crossover between CSA prevention and broader child maltreatment prevention, as well as issues related to gender and patriarchal social norms, prevention initiatives would be able to relate specifically to the risk factors identified as being more relevant in the developing nations in which they are being implemented.

This review highlights the need for prevention programs that are broader and go beyond school-based sexual abuse prevention knowledge of children (particularly given the higher out-of-school rates in developing countries), linked to a framework for comprehensive CSA prevention, and preferably an even broader child maltreatment prevention framework.

Considering the opportunities afforded through technological solutions (where these can be appropriately used), research is needed to investigate the efficacy of how these can be applied in developing countries, with consideration to the limitations and risks that come with internet access in relation to CSA, could support broader roll-out of effective prevention interventions.

With the use of western-led interventions in developing countries to reduce CSA, it is essential to consider cultural adaptation of such interventions, based on a solid examination of cultural beliefs that may be barriers or enablers of prevention efforts. As well as development of new culturally appropriate and specific CSA prevention strategies, such adaptations would need to ensure consideration of the perceived role of children and young people within the societies that interventions are being applied in, as well as the level of importance placed on community and societal cohesion.

The primary prevention programs that governments and non-government agencies begin utilizing should go beyond school-based protective behaviors programs, measuring only the increase in knowledge and skills, but rather be linked to a broader framework for comprehensive prevention that includes improving conditions of safety for children, such as addressing workforce capabilities and building engagement with parents and the broader community. Those leading prevention efforts should include within their programs research—including qualitative methodologies—to evaluate the effectiveness of prevention efforts in specific contexts. For example, this could include programs delivered in contexts where children may not be attending school regularly, and where other risks to their safety and wellbeing (from poverty, neglect, child labor, etc.) may intersect with their risk of CSA and the capacity of prevention initiatives to be effective.

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Appendix A. Supplementary data

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References[1]

Abeid, M., Muganyizi, P., Massawe, S., Mpembeni, R., Darj, E., & Axemo, P. (2015). Knowledge and attitude towards rape and child sexual abuse - a community-based cross-sectional study in Rural Tanzania. *BMC Public Health, 15*. https://doi.org/10.1186/s12889-015-1757-7.

Abeid, M., Muganyizi, P., Mpembeni, R., Darj, E., & Axemo, P. (2015). A community-based intervention for improving health-seeking behavior among sexual violence survivors: A controlled before and after design study in rural Tanzania. *Global Health Action, 8*. https://doi.org/10.3402/gha.v8.28608 28608–28608.

Ajduković, M., Sušac, N., & Rajter, M. (2013). Gender and age differences in prevalence and incidence of child sexual abuse in Croatia. *Croatian Medical Journal, 54*(5), 469–479. https://doi.org/10.3325/cmj.2013.54.469.

Al-Eissa, M. A., AlBuhairan, F. S., Qayad, M., Saleheen, H., Runyan, D., & Almuneef, M. (2015). Determining child maltreatment incidence in Saudi Arabia using the ICAST-CH: A pilot study. *Child Abuse & Neglect, 42*, 174–182. https://doi.org/10.1016/j.chiabu.2014.08.016.

Ali, N. S., Ali, F. N., Khuwaja, A. K., & Nanji, K. (2014). Magnitude and factors associated with child abuse in a Mega City of Developing Country Pakistan. *Iranian Journal of Pediatrics, 24*(2), 140–146.

Al-Saif, D. M., Al-Eissa, M., Saleheen, H., Al-Mutlaq, H., Everson, M. D., & Almuneef, M. A. (2018). Professionals' attitude toward reporting child sexual abuse in Saudi Arabia. *Journal of Child Sexual Abuse, 27*(1), 22–37. https://doi.org/10.1080/10538712.2017.1360429.

Amado, B. G., Arce, R., & Herraiz, A. (2015). Psychological injury in victims of child sexual abuse: A meta-analytic review. *Psychosocial Intervention, 24*(1), 49–62. https://doi.org/10.1016/j.psi.2015.03.002.

Barrera, M., Calderon, 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.

Barth, J., Bermetz, L., Heim, E., Trelle, S., & Tonia, T. (2013). The current prevalence of child sexual abuse worldwide: A systematic review and meta-analysis. *International Journal of Public Health, 58*(3), 469–483. https://doi.org/10.1007/s00038-012-0426-1.

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.

Bridgewater, G. (2016). Physical and sexual violence against children in Kenya within a cultural context. *Community Practitioner: The Journal of the Community Practitioners' & Health Visitors' Association, 89*(2), 30–34.

Cashmore, J., & Shackel, R. (2013). *The long-term effects of child sexual abuse.* Retrieved fromhttps://aifs.gov.au/cfca/sites/default/files/cfca/pubs/papers/a143161/cfca11.pdf.

*Citak Tunc, G., Gorak, G., Ozyazicioglu, N., Ak, B., Isil, O., & Vural, P. (2018). Determining the appropriateness of the "What if" situations test (WIST) with Turkish pre-schoolers. *Journal of Child Sexual Abuse, 27*(3), 292–304. https://doi.org/10.1080/10538712.2018.1425947.

de Jong, R., Alink, L., Bijleveld, C., Finkenauer, C., & Hendriks, J. (2015). Transition to adulthood of child sexual abuse victims. *Aggression and Violent Behavior, 24*, 175–187. https://doi.org/10.1016/j.avb.2015.04.012.

*Dunn, M. (2011). The learning of sexual abuse prevention concepts and the reliability of the CKAQ-RIII in the South African context. *Social Work / Maatskaplike Werk, 47*(2), 155–175.

Fergusson, D. M., Boden, J. M., & Horwood, L. J. (2008). Exposure to childhood sexual and physical abuse and adjustment in early adulthood. *Child Abuse & Neglect, 32*(6), 607–619. https://doi.org/10.1016/j.chiabu.2006.12.018.

Finkelhor, D. (1984). *Child sexual abuse.* New York, NY: Free Press.

Finkelhor, D., Shattuck, A., Turner, H. A., & Hamby, S. L. (2014). The lifetime prevalence of child sexual abuse and sexual assault assessed in late adolescence. *Journal of Adolescent Health, 55*(3), 329–333. https://doi.org/10.1016/j.jadohealth.2013.12.026.

*Fitriana, R. N., Suryawati, C., & Zubaidah (2018). Effect of peer education model on knowledge and self-efficacy of children in the prevention of physical sexual violence. *Belitung Nursing Journal, 4*(1), 51–57.

Gushwa, M., Bernier, J., & Robinson, D. (2018). Advancing child sexual abuse prevention in schools: An exploration of the effectiveness of the enough! Online training program for K-12 teachers. *Journal of Child Sexual Abuse,* 1–16. https://doi.org/10.1080/10538712.2018.1477000.

Hanson, R. F., Ralston, E., Self-Brown, S., Ruggiero, K. J., Saunders, B. E., Gaw Love, A., ... Williams, R. (2008). Description and preliminary evaluation of the child abuse school liaison program: A secondary prevention program for school personnel. *Journal of Psychological Trauma, 7*(2), 91–103. https://doi.org/10.1080/19322880802231783.

Herrenkohl, T. I., Lonne, B., Scott, D., & Higgins, D. (2019). New directions for public health approaches: Key themes and issues. In B. Lonne, D. Scott, D. Higgins, & T. Herrenkohl (Eds.). *Re-visioning public health approaches for protecting children* (pp. 487–499). Springer. https://doi.org/10.1007/978-3-030-05858-6_28 Child Maltreatment 9: Contemporary Issues in Research and Policy Series.

Holzer, P. J., Higgins, J., Bromfield, L. M., Richardson, N., & Higgins, D. J. (2006). *The effectiveness of parent education and home visiting child maltreatment prevention programs. (Child Abuse Prevention Issues No. 24).* Available at:Melbourne: National Child Protection Clearinghouse, Australian Institute of Family Studies. https://aifs.gov.au/cfca/publications/effectiveness-parent-education-and-home-visiting-chil.

*Hurtado, A., Katz, C. L., Ciro, D., Guttfreund, D., & Nosike, D. (2014). Children's knowledge of sexual abuse prevention in El Salvador. *Annals of Global Health, 80*(2), 103–107.

[1] References marked with an asterisk (*) indicate studies included in the systematic review.

International Statistical Institute. (n.d.). Developing countries.
Innocenti Research Centre (2003). *Children in institutions: The beginning of the end? The cases of Italy, Spain, Argentina, Chile and Uruguay*. Florence, Italy: UNICEF International Child Development Centre. https://www.unicef-irc.org/publications/pdf/insight8e.pdf.
Kacker, L., Varadan, S., & Kumar, P. (2007). *Study on child abuse: India 2007*. Retrieved fromhttps://resourcecentre.savethechildren.net/library/study-child-abuse-india-2007:.
Kaufman, K., Erooga, M., Stewart, K., Zatkin, J., McConnell, E., Tews, H., ... Higgins, D. (2016). *Risk profiles for institutional child sexual abuse. A literature review*Retrieved fromhttps://www.childabuseroyalcommission.gov.au/sites/default/files/file-list/Research%20Report%20-%20Risk%20profiles%20for%20institutional%20child%20sexual%20abuse%20-%20Causes.pdf.
Kaufman, K., Erooga, M., Higgins, D., & Zatkin, J. (2019a). Youth-serving organization safety risks and the situational prevention approach. In B. Lonne, D. Scott, D. Higgins, & T. I. Herrenkohl (Eds.). *Re-visioning public health approaches for protecting children* (pp. 165–180). Cham: Springer International Publishing.
Kaufman, K., Erooga, M., Higgins, D., & Zatkin, J. (2019b). Youth-serving organization safety risks and the situational prevention approach. In B. Lonne, D. Scott, D. Higgins, & T. I. Herrenkohl (Eds.). *Re-visioning public health approaches for protecting children*. Switzerland: Springer.
Kloppen, K., Haugland, S., Svedin, C. G., Maehle, M., & Breivik, K. (2016). Prevalence of child sexual abuse in the Nordic countries: A literature review. *Journal of Child Sexual Abuse, 25*(1), 37–55. https://doi.org/10.1080/10538712.2015.1108944.
Knoll, J. (2010). Teacher sexual misconduct: Grooming patterns and female offenders. *Journal of Child Sexual Abuse, 19*(4), 371–386.
*Kucuk, S., Platin, N., & Erdem, E. (2017). Increasing awareness of protection from sexual abuse in children with mild intellectual disabilities: An education study. *Applied Nursing Research, 38*, 153–158. https://doi.org/10.1016/j.apnr.2017.10.016.
Letourneau, E. J., Brown, D. S., Fang, X., Hassan, A., & Mercy, J. A. (2018). The economic burden of child sexual abuse in the United States. *Child Abuse & Neglect, 79*, 413–422. https://doi.org/10.1016/j.chiabu.2018.02.020.
Letourneau, E. J., Eaton, W. W., Bass, J., Berlin, F. S., & Moore, S. G. (2014). The need for a comprehensive public health approach to preventing child sexual abuse. *Public Health Reports, 129*(3), 222–228. https://doi.org/10.1177/003335491412900303.
Letourneau, E. J., Schaeffer, C. M., Bradshaw, C. P., & Feder, K. A. (2017). Preventing the onset of child sexual abuse by targeting young adolescents with universal prevention programming. *Child Maltreatment, 22*(2), 100–111. https://doi.org/10.1177/1077559517692439.
Levine, J. A., & Dandamudi, K. (2016). Prevention of child sexual abuse by targeting pre-offenders before first offense. *Journal of Child Sexual Abuse, 25*(7), 719–737. https://doi.org/10.1080/10538712.2016.1208703.
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.
Mathews, B. (2017). Optimising implementation of reforms to better prevent and respond to child sexual abuse in institutions: Insights from public health, regulatory theory, and Australia's Royal Commission. *Child Abuse & Neglect, 74*, 86–98.
Mathews, B., & Collin-Vezina, D. (2017). Child sexual abuse: Toward a conceptual model and definition. *Trauma, Violence & Abuse*. https://doi.org/10.1177/1524838017738726 1524838017738726.
Mathews, B. P., Walsh, K. M., Dunne, M. P., Katz, I., Arney, F., Higgins, D., ... Bates, S. (2016). *Scoping study for research into the prevalence of child abuse in Australia: Final report*255.
McMahon, P. M., & Puett, R. C. (1999). Child sexual abuse as a public health issue: Recommendations of an expert panel. *Journal of Sexual Abuse: A Journal of Research & Treatment, 11*(4), 257–266.
Meinck, F., Cluver, L. D., Boyes, M. E., & Loening-Voysey, H. (2016). Physical, emotional and sexual adolescent abuse victimisation in South Africa: Prevalence, incidence, perpetrators and locations. *Journal of Epidemiology and Community Health, 70*(9), 910–916. https://doi.org/10.1136/jech-2015-205860.
Meinck, F., Cluver, L. D., Boyes, M. E., & Mhlongo, E. L. (2015). Risk and protective factors for physical and sexual abuse of children and adolescents in Africa: A review and implications for practice. *Trauma, Violence & Abuse, 16*(1), 81–107. https://doi.org/10.1177/1524838014523336.
Mertaugh, M. T., Jimenez, E. Y., & Patrinos, H. A. (2009). *The global challenge in basic education: Why continued investment in basic education is important.* Retrieved fromhttp://documents.worldbank.org/curated/en/484151468313820188/The-global-challenge-in-basic-education-why-continued-investment-in-basic-education-is-important:.
Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., ... PRISMA-P Group (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews, 4*(1).
Moore, T., McArthur, M., Heerde, J., Roche, S., & O'Leary, P. (2016). *Our safety counts: Children and young people's perceptions of safety and institutional responses to their safety concerns causes. A report for the Royal Commission into institutional responses to child sexual abuse*Retrieved fromhttps://safeguardingchildren.acu.edu.au/research_and_resources/institute_of_child_protection_studies_report_our_safety_counts:.
Morley, S., & Higgins, D. (2018). *Understanding situational crime prevention for child sexual abuse: What services need to know.* Retrieved fromhttps://safeguardingchildren.acu.edu.au/practice_tools/articles/situational_crime_prevention.
Moulden, H. M., Firestone, P., Kingston, D. A., & Wexler, A. F. (2010). A description of sexual offending committed by Canadian teachers. *Journal of Child Sexual Abuse, 19*(4), 403–418.
*Neherta, M., Machmud, R., Damayanti, R., & Afrizal (2017). The difference in intervention of sexual abuse prevention by two variance professions on primary school children in Padang. *Indian Journal of Community Psychology, 29*(1), 118–122.
Olafson, E. (2014). Child sexual abuse: Demography, impact, and interventions. *Journal of Child & Adolescent Trauma, 4*(1), 8–21. https://doi.org/10.1080/19361521.2011.545811.
Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—A web and mobile app for systematic reviews. *Systematic Reviews, 5*(1), 210. https://doi.org/10.1186/s13643-016-0384-4.
Pereda, N., Guilera, G., Forns, M., & Gomez-Benito, J. (2009). The prevalence of child sexual abuse in community and student samples: A meta-analysis. *Clinical Psychology Review, 29*(4), 328–338. https://doi.org/10.1016/j.cpr.2009.02.007.
Plummer, M., & Cossins, A. (2018). The cycle of abuse: When victims become offenders. *Trauma, Violence & Abuse, 19*(3), 286–304. https://doi.org/10.1177/1524838016659487.
Plummer, C. A., & Njuguna, W. (2009). Cultural protective and risk factors: Professional perspectives about child sexual abuse in Kenya. *Child Abuse & Neglect, 33*(8), 524–532. https://doi.org/10.1016/j.chiabu.2009.02.005.
Putnam, F. W. (2003). Ten-year research update review: Child sexual abuse. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*(3), 269–278. https://doi.org/10.1097/01.CHI.0000037029.04952.72.
Quadara, A. (2019). Child sexual abuse prevention strategies for population-level change: Challenges and future directions. In B. Lonne, D. Scott, D. Higgins, & T. I. Herrenkohl (Eds.). *Re-visioning public health approaches for protecting children* (pp. 145–164). Switzerland: Springer.
Quadara, A., Nagy, V., Higgins, D., & Siegel, N. (2015). *Conceptualising the prevention of child sexual abuse.* Retrieved fromhttps://aifs.gov.au/publications/conceptualising-prevention-child-sexual-abuse:.
Radford, L., Corral, S., Bradley, C., & Fisher, H. L. (2013). The prevalence and impact of child maltreatment and other types of victimization in the UK: Findings from a population survey of caregivers, children and young people and young adults. *Child Abuse & Neglect, 37*(10), 801–813. https://doi.org/10.1016/j.chiabu.2013.02.004.
Royal Commission into Institutional Responses to Child Sexual Abuse (2017). *Final reportVolume 2*Commonwealth of Australia Retrieved from https://www.childabuseroyalcommission.gov.au/nature-and-cause.
Rumble, L., Febrianto, R. F., Larasati, M. N., Hamilton, C., Mathews, B., & Dunne, M. P. (2018). Childhood sexual violence in Indonesia: A systematic review. *Trauma, Violence & Abuse*1524838018767932. https://doi.org/10.1177/1524838018767932.
Russell, D., & Higgins, D. (2020). *Confirmatory factor analysis and psychometric properties of the Safeguarding Capabilities in preventing Child Sexual Abuse scale.* [Manuscript in preparation].

Russell, D., & Higgins, D. (2019). Safeguarding Capabilities in preventing Child Sexual Abuse: Exploratory factor analysis of a scale measuring safeguarding capabilities in youth-serving organizations workers. *Child Maltreatment*. https://doi.org/10.1177/1077559519870253.

*Sinclair, J., Sinclair, L., Otieno, E., Mulinge, M., Kapphahn, C., & Golden, N. H. (2013). A self-defense program reduces the incidence of sexual assault in Kenyan adolescent girls. *Journal of Adolescent Health, 53*(3), 374–380. https://doi.org/10.1016/j.jadohealth.2013.04.008.

Skeen, S., & Tomlinson, M. (2013). A public health approach to preventing child abuse in low-and middle-income countries: A call for action. *International Journal of Psychology, 48*(2), 108–116.

Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R. A., & van Ijzendoorn, M. H. (2015). The prevalence of child maltreatment across the globe: Review of a series of meta-analyses. *Child Abuse Review, 24*(1), 37–50. https://doi.org/10.1002/car.2353.

Sullivan, J., & Beech, A. (2002). Professional perpetrators: Sex offenders who use their employment to target and sexually abuse the children with whom they work. *Child Abuse Review, 11*(3), 153–167.

Tanaka, M., Suzuki, Y. E., Aoyama, I., Takaoka, K., & MacMillan, H. L. (2017). Child sexual abuse in Japan: A systematic review and future directions. *Child Abuse & Neglect, 66*, 31–40. https://doi.org/10.1016/j.chiabu.2017.02.041.

Torrey, E. F. (1997). *Out of the Shadows: Confronting America's Mental Illness Crisis.*. New York, NY: Wiley.

Tutty, L. M. (1995). The revised Children's Knowledge of Abuse Questionnaire: Development of a measure of children's understanding of sexual abuse prevention concepts. *Journal of Social Work Research, 19*(2), 112–120.

UNESCO (2018). One in Five Children, Adolescents and Youth is Out of School. *United Nations Education, Scientific and Cultural Organisation Fact Sheet No., 48*, 1–13.

United Nations (2014). *Country classification.* Retrieved fromhttps://www.un.org/en/development/desa/policy/wesp/wesp_current/2014wesp_country_classification.pdf:.

Veenema, T. G., Thornton, C. P., & Corley, A. (2015). The public health crisis of child sexual abuse in low and middle income countries: An integrative review of the literature. *International Journal of Nursing Studies, 52*(4), 864–881. https://doi.org/10.1016/j.ijnurstu.2014.10.017.

Walsh, K., Zwi, K., Woolfenden, S., & Shlonsky, A. (2018). School-based education programs for the prevention of child sexual abuse. *Research on Social Work Practice, 28*(1), 33–55. https://doi.org/10.1177/1049731515619705.

Whitaker, D. J., Le, B., Karl Hanson, R., Baker, C. K., McMahon, P. M., Ryan, G., ... Rice, D. D. (2008). Risk factors for the perpetration of child sexual abuse: A review and meta-analysis. *Child Abuse & Neglect, 32*(5), 529–548. https://doi.org/10.1016/j.chiabu.2007.08.005.

Whitehead, J., & Roffee, J. (2016). Child sexual abuse in Fiji: Authority, risk factors and responses. *Current Issues in Criminal Justice, 27*(3), 323–334.

World Health Organisation (2003). *Guidelines for medico-legal care for victims of sexual violence.* Retrieved fromhttp://www.who.int/violence_injury_prevention/publications/violence/med_leg_guidelines/en/.

World Health Organization (2010). *Violence and health in the WHO African region.* Retrieved from https://www.afro.who.int/publications/violence-and-health-who-african-regionWorld Health Organization.

World Health Organization (2015). *Violence prevention in the South-East Asia Region. Retrieved from https://apps.who.int/iris/handle/10665/164334.* World Health Organization.

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.

Wurtele, S. K., Gillispie, E. I., Currier, L. L., Franklin, C. F., & Neglect (1992). A comparison of teachers vs. parents as instructors of a personal safety program for preschoolers. *Child Abuse & Neglect, 16*(1), 127–137.

Wurtele, S. K., Hughes, J., & Owens, J. S. (1998). An examination of the reliability of the "What if" situations test: A brief report. *Journal of Child Sexual Abuse, 7*(1), 41–52.

Wurtele, S. K., Kast, L. C., Miller-Perrin, C. L., & Kondrick, P. A. (1989). Comparison of programs for teaching personal safety skills to preschoolers. *Journal of Consulting and Clinical Psychology, 57*(4), 505–511.

Wurtele, S. K., Saslawsky, D. A., Miller, C. L., Marrs, S. R., & Britcher, J. C. (1986). Teaching personal safety skills for potential prevention of sexual abuse: A comparison of treatments. *Journal of Consulting and Clinical Psychology, 54*(5), 688–692.

*Zhang, W., Chen, J., Feng, Y., Li, J., Liu, C., & Zhao, X. (2014). Evaluation of a sexual abuse prevention education for Chinese preschoolers. *Research on Social Work Practice, 24*(4), 428–436. https://doi.org/10.1177/1049731513510409.

Zolotor, A. J., Runyan, D. K., Dunne, M. P., Jain, D., Peturs, H. R., Ramirez, C., ... Isaeva, O. (2009). ISPCAN Child Abuse Screening Tool Children's Version (ICAST-C): Instrument development and multi-national pilot testing. *Child Abuse & Neglect, 33*(11), 833–841. https://doi.org/10.1016/j.chiabu.2009.09.004.