School-based abuse prevention programs for children: A scoping review

Amanda Nyberg[c], Ulrika Ferm[b] and Juan Bornman[a,*]

[a]Professor Centre for AAC, University of Pretoria, Pretoria, South Africa;

[b]Child Neuropsychiatry BNK, Sahlgrenska University Hospital, Göteborg, Sweden;

[c]Student at the Centre for AAC, University of Pretoria, Pretoria, South Africa

*Correspondence to: juan.bornman@up.ac.za

Abstract

Child abuse can have serious long-term physical, psychological, behavioural, societal and economic consequences. The aim of this scoping review was to map the literature on abuse prevention programs conducted at schools for pre-teenage children. The review outlines the specific components and methods of the programs, the measurements used and the results obtained. The review included 4135 children, 1841 parents, 16 teachers and two school counsellors. A scoping review of published articles was conducted following the Joanna Briggs methodology. PubMed, PSYCInfo, ERIC, The Cochrane Library and CINAHL were searched for articles published between 1989 and 2018. The search yielded 2042 publications of which nine met the inclusion criteria. Eight of the publications reported positive results. One publication reported mixed results in terms of the safety skills and knowledge of the participating children. There were several similarities between the programs regarding key components and methods of delivery. None of the articles included children with disabilities, even though they are particularly vulnerable of becoming victims of abuse.

KEYWORDS primary prevention; abuse; disability; prevention program; school-based

Introduction

Child abuse can have serious long-term physical, psychological, behavioral, societal and economic consequences (Bulik et al., 2001). Primary abuse prevention has been proposed as an important strategy to decrease child abuse (World Health Organization, 2016). These prevention programs are required to address multiple types of abuse and be informed by evidence (Mikton et al., 2016). Furthermore, the United Nations stresses the importance of ensuring that all information provided to children is appropriate, accurate and in an accessible format. Such information must strengthen and empower their competence related to life skills as well as their rights; it must address specific potential risks, and increase their self-protection (e.g. by developing positive relationships with peers and combating bullying) (United Nations, 2011). As they are typically regarded as places of close and continuous contact between children during a life stage when they are vulnerable to abuse, schools are considered to be an optimal place for delivering abuse prevention programs (Johnson, 1994). Teachers play an important role in school-based abuse prevention by providing trusted relationships with the children, making them trusted adults, while also positioning them to implement programs and model non-violent conflict resolutions in their classrooms (Abrahams et al., 1992).

In a Cochrane Library review on school-based programs for preventing child sexual abuse in children aged 5-12 years and adolescents aged 13-18 years (Walsh et al., 2015), it was reported that the included programs were effective in increasing prevention skills and knowledge of concepts of sexual abuse. These programs focused on teaching concepts such as different kinds of touches, safety rules, different types of secrets, who to tell (reporting) and private parts of the body. There was no evidence of any potential harm from participating in any of the programs (Walsh et al., 2015). Brassard and Fiorvanti (2015) found that abuse prevention programs that included active participation, didactic instruction and group discussions, and that used a variety of methods (e.g. roleplaying, videos, instruction) as well as covered a range of concepts and safety skills, had the best outcomes. Few studies

have examined the long-term effects of abuse prevention programs. Finkelhor et al. (1995) evaluated the impact of victimization prevention interventions on the strategies that children used in real-life situations to avoid and deal with at-risk situations. A total of 67% of the children in their study had participated in a school-based abuse prevention program. Children who attended more comprehensive programs received higher scores on a test of knowledge of sexual abuse than children who attended less comprehensive programs or who had not attended any abuse prevention program at all (Finkelhor et al., 1995). The programs were considered more comprehensive if they included at least nine of the following twelve components: knowledge of sexual abuse; bullying; good and bad touch; confusing touch; incest; screaming and yelling to attract attention; telling an adult; abuse is not the child's fault; practicing skills in the classroom; information to take home; a meeting for parents; repetition of the material over more than one day (Finkelhor et al., 1995).

The Social-Ecological model

Ecological models have increasingly been used in research and practice over the past thirty years (Sallis et al., 2008). These models are centered on the key concept that human behavior has several different levels of influence and can be used to develop extensive intervention approaches that target all levels (Sallis et al., 2008). For abuse prevention, aspects that are similar to those considered for health promotion need to be considered. In the health field, the social-ecological model is based on several core concepts and principles, namely the following: well-being is influenced by a variety of environmental factors; personal and environmental factors often interact; certain behaviors and roles have an effect on well-being within the community setting; physical and social conditions influence health; interdisciplinary research is vital for developing effective health promotion programs; and interventions need to be developed in response to the unavailability of environmental resources (Stokols, 1996).
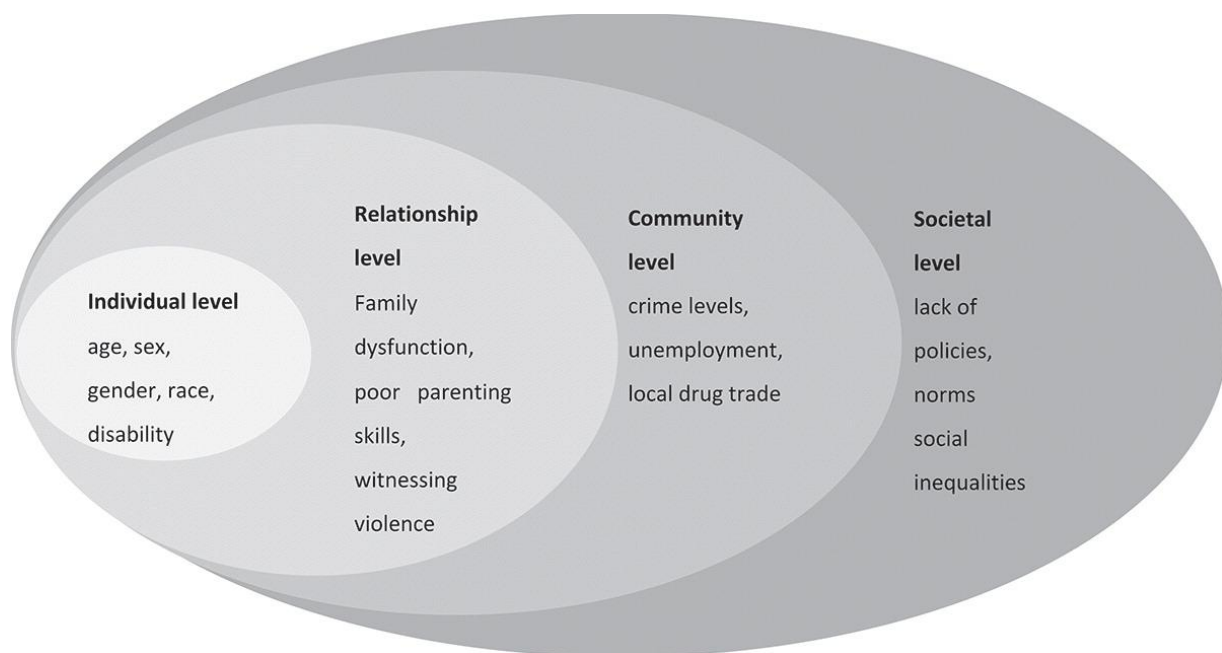
Figure 1. The Social-Ecological Model

Besides using the social-ecological model for developing health promotion interventions, it can also be used to develop abuse prevention programs. The social-ecological model consists of four factors that all influence each other, namely individual factors, relationship factors, community factors and societal factors (Figure 1). In the case of abuse, the model can be used to understand the risk factors for abuse to create programs that effectively operate on all levels and address the root causes of the problem (World Health Organization, 2016). Individual risk factors include, among others, age, sex, gender, race and disability (World Health Organization, 2016). Children with communicative and cognitive disabilities are at increased risk due to their difficulties with communicating and understanding spoken language. Relationship risk factors include dysfunction in the family, poor parenting skills and witnessing violence in the home (World Health Organization, 2016). Community-level risk factors are aspects such as high crime levels, unemployment and local drug trade (World Health Organization, 2016). Society-level risk factors include norms where violence is accepted, where health and social policies are absent or not implemented, and where social inequalities exist (World Health Organization,

2016). The social-ecological model can therefore be used effectively to understand the range of factors that influence the child's risk of becoming a victim of abuse, and to understand the factors that might protect them from becoming or remaining victims.

The present review

The current scoping review aims to provide an overview of the available research that has been conducted on school-based abuse prevention programs for children 7-12 years old. The focus is on programs that teach prevention of more than one kind of abuse (e.g. sexual and physical abuse or emotional abuse and neglect) to the children themselves. The review aims to map out the specific components of the programs, the methods of delivery, the measurements used, and the results obtained. To our knowledge, this is the first scoping review with this specific purpose.

The results from the scoping review will ultimately be used to develop a school-based abuse prevention program for children with communicative and/or cognitive disabilities. Since very little research has been published on abuse prevention programs developed for children with communicative and/or cognitive disabilities, disability was not one of the inclusion criteria.

Materials and Methods

This review followed the recommendations and guidelines for scoping reviews as proposed by Arksey and O'Malley (2005) and The Joanna Briggs Institute (2015). A scoping review was deemed appropriate for this study, because the purpose was to map out existing research articles on school-based abuse prevention programs and to describe these, regardless of study design and methodology used (Arksey & O'Malley, 2005).

Search process

The scoping review included a search of several bibliographic databases, hand searches of specific journals, and the scanning of reference lists of the included articles. The specific search terms were developed by the researchers together with a research librarian, who conducted the literature

search. Several trial searches were conducted by the research librarian and the first author by using different search terms in different combinations, and they then reviewed the results of the searches. The search terms had been piloted in a previous search and were revised according to the findings of the pilot study.

The final search terms used for the PubMed search were the following: Boy OR Boys OR Child OR Children OR Childhood OR Girl OR Girls OR Young kids OR Youngster OR Young person OR Young people AND School* OR Schools (Mesh) AND Abuse* OR Assault* OR Cruelty OR Ill-treat* OR Mistreat* OR Maltreat* OR Molest* OR Oppression OR Child Abuse (Mesh) AND Program* OR Intervention AND Prevention OR Preventing OR Evaluation OR Program evaluation (Mesh) OR School Health Services (Mesh). The same search terms or variations to suit the database in question, were used in all searches. Five databases were searched: PubMed, CINAHL, The Cochrane Library, ERIC and PSYCInfo. The search was limited to the period January 1989 to December 2018. The 1989 starting point was selected as the Convention on the Rights of the Child (United Nations, 1989) was published in 1989, which could have resulted in an increase in the number of abuse prevention efforts. A strict focus was kept on published research articles and therefore grey literature was not searched. In total, 2683 articles were found and after the duplicates were removed, 2047 remained, as shown in the PRIMSA (Preferred Reporting Items for Systematic Review and Meta-Analyses) flowchart in Figure 2.

In addition to the database search, the journals *Child Abuse and Neglect* (January 1989 - December 2018) and *Child Abuse* (1996 - 2018) were hand searched. The hand search produced six articles (Figure 2). The reference lists of the articles that were included in the scoping review were also hand searched, but this search produced no new results. The articles that were obtained through the database search and the hand search were imported into RAYYAN (https://rayyan.qcri.org), a web application for creating and screening systematic reviews, which allows researchers to collaborate on reviews and screen papers independently.
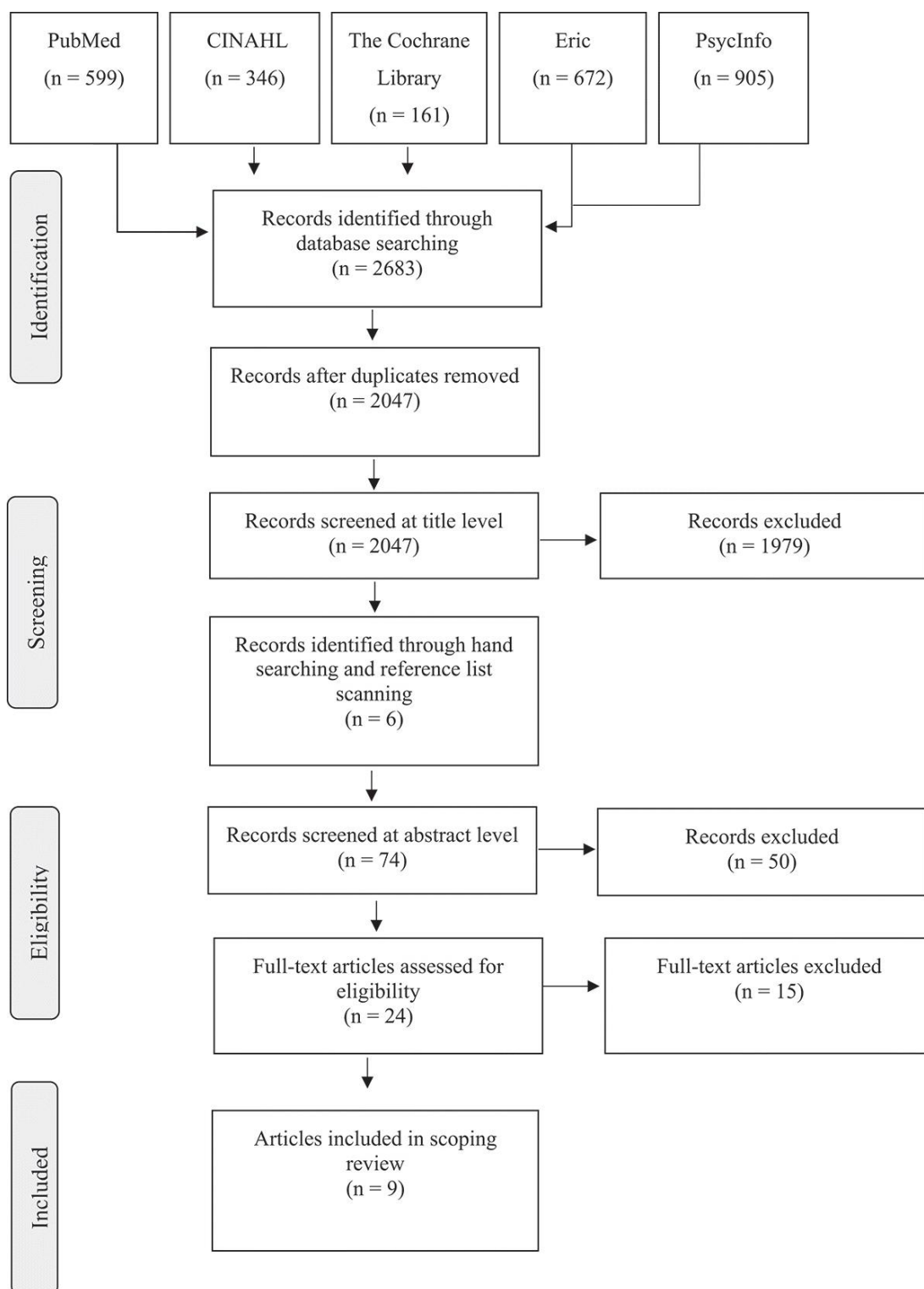
Figure 2. PRIMSA (Preferred Reporting Items for Systematic Review and Meta-Analyses) flowchart of search process and article selection

Table 1

Inclusion and exclusion criteria for scoping review

PIO	Inclusion criteria	Exclusion criteria
Population	Children 7 to 12 years old	Focus only on children younger than 7 or only older than 12
Intervention	School- based abuse prevention program	Abuse prevention program in another setting, i.e. community centre, nurses office
	Training/components directed at children	Aimed only at adults (i.e. teachers, parents)
	Low, middle and high- income settings	
	Address more than one kind of abuse, i.e. physical abuse and verbal abuse	Focus only about one kind of abuse, i.e. child sexual abuse
	Focus on abuse perpetrated by adults (adults abusing children)	Directed at child- to- child abuse, such as bullying
Outcome	Self-esteem, safety knowledge and skills	

Inclusion and exclusion criteria

Inclusion and exclusion criteria were strictly adhered to. The criteria were developed using the PIO – Population, Intervention and Outcome – system (Booth et al., 2000). To distinguish between other kinds of abuse programs, for example those aimed specifically at parents or teachers to decrease their

abuse of children (e.g. the ACT Training Program (Guttman & Mowder, 2005) and the Good School Toolkit (Devries et al., 2018), the concept of child involvement in the program was vital. The program had to be delivered in a school setting to children between 7 and 12 years of age and at least teach the children about two forms of abuse, for example physical and sexual abuse, or emotional abuse and neglect. Articles that labeled the intervention as only a child sexual abuse prevention program were excluded from the review, as several reviews had already been conducted on school-based child sexual abuse programs, including the previously mentioned Cochrane review by Walsh et al. (2015)Articles were included if children who participated in the program were between 7 and 12 years of age, however not all children in the program had to be within that age range. For example, an article could include children who were 7 years old as well as children in other age groups. Effects on children's self-esteem, safety knowledge and skills or empowerment had to be presented for the article to be included in this scoping review.

Screening

After the database search, which resulted in 2047 articles (2683 articles before duplicates were removed), the articles were screened in several phases. In the first phase, the articles were screened on a title level and 1979 articles were excluded. The screening resulted in 68 articles being included for abstract screening. Another six articles were included from the hand search and reference scanning, which resulted in a total of 74 articles. The articles were subsequently screened by the first and second author independently on an abstract level for suitability and relevance using the PIO (Population, Intervention and Outcome) criteria. Any disagreements were discussed and resolved between the three authors. Twenty-four articles were included for full-text screening, which was done by the first, second and third author independently. All disagreements were discussed and resolved. Nine articles were included in the scoping review. Fifteen articles were excluded because they did not describe a specific program (n=2), used the wrong outcome measure (e.g. disclosure rates, reduction in abuse from

teachers to students) (n=10), were not child focused (n=1), focused only on child sexual abuse (n=1) or were an opinion piece (n=1). The search and selection processes are presented in the PRISMA flow chart shown in Figure 2.

Data extraction

A preliminary version of the data extraction tool was made using the suggestions from The Joanna Briggs Institute (2015). The data extraction tool was extensive and allowed for detailed information about the articles to be completed, including information about the components and length of the programs, the research design and measurements used, and the outcomes of the article. The preliminary version was presented to and critiqued by an expert panel and revisions were made accordingly. A pilot test of the data extraction tool was done using three articles that had been included for full-text screening, and revisions were made accordingly. Data was extracted by the first, second and third author independently and compared and combined to minimize errors and to ensure that rich data was extracted from the articles.

<div align="center">Results</div>

Table 2 shows an overview of the nine programs that were included in the review. Most of the programs, eight out of nine, originated in high-income countries, with four of these originating from the United States. Only one of the programs came from a low- or middle-income country, Sri Lanka. The articles were published between 1992 and 2018. Four of the articles included children only as participants and five included a combination of children, parents and/or teachers or other school staff. All programs were taught to children by adults. The duration of the programs varied from one session to twenty sessions and from one week to twelve weeks. A positive result, as noted in Table 2, signifies that the outcomes of the programs were positive.

Table 2

Overview of programs in chronological order

Authors	Program	Aim	Research design	Participants	Key components	Duration	Method of delivery	Results
White et. al. (2018)	Learn to BE SAFE With Emmy ™	To build resilience and coping skills. To teach children prevention strategies	Cluster-randomized controlled trial with pretest-posttest design including 6 month follow-up	Children 5-7 yr: n= 611 Parents: n= 357	Secrets Strangers Body parts Safe relationships Safe/unsafe touches Feelings Safety rules Personal space Safe/unsafe situations	5 weeks (once /week)	Roleplay Discussion Modeling Skills practice Simulated scenarios	Positive
Lam et al., (2018)	Be Safe	To prevent sexual abuse and to teach safety skills related to other kinds of abuse	Cross sectional retrospective approach	Children: 5-9 yr: number not disclosed Parents: n= 835	Safe/unsafe touches Children's rights Saying no Safe relationships Safety rules Adults'	10-12 weeks, 10-20 min sessions	Songs/music Role play Storytelling Posters Games Lesson cards	Positive

Authors	Program	Aim	Research design	Participants	Key components	Duration	Method of delivery	Results
					responsibilities to protect children		Booklets Bookmarks Leaflets for parents	
Dale et al., (2016)	Learn to BE SAFE With Emmy ™	To build resilience and coping skills. To teach children prevention strategies	Randomized controlled trial with pretest-posttest design and 6 month follow-up	Children 5-7 yr: n= 245 Parents, T1: n= 117 T2: n= 85 Teachers: n= 6	Secrets Strangers Body parts Safe relationships Safe/unsafe touches Feelings Safety rules Personal space Safe/unsafe situations	5 weeks (once per week)	Role play Discussion Modeling Skills practice Simulated scenarios	Positive
Moreno-Manso et al., (2014)	The prevention program	To improve children's capacity to handle threatening situations.	Pretest-posttest design with control group and 6 month follow-up	Children 9-10 yr: n= 317	Children's rights Feelings Safety rules Information about abuse Empathy	12 weeks with one two hour-session per week	Songs/music Role play Storytelling Drawing/painting Tutorial action	Positive

Authors	Program	Aim	Research design	Participants	Key components	Duration	Method of delivery	Results
		Includes physical abuse, sexual abuse, emotional abuse and neglect			Healthy eating and basic needs Distinguishing between respect and extreme obedience and presents and bribes		Physical exercises Clay	
Leihua (1997)	Talking about touching	To teach personal safety skills	Pretest-posttest design without random assignation	Children 3-9 yr: n= 133 Teachers: n= 10 School counsellors n= 2	Safe/unsafe touches Safety rules Strangers Assertiveness Safety rules for other situations (e.g. riding in a car and responding to a fire)	6-8 weeks, 10-20 minute sessions.	Work sheets Video Audio Discussion Posters Skills practice Home activities	Positive
Warden et al., (1997)	Kidscape	To increase children's ability to deal with being	Pretest- posttest design with 2 month follow-up.	Children 6 and 10 yr: n= 120	Safe/unsafe touches Saying no Safety rules	Weeks 10-20 sessions	Work sheets Role play Storytelling	Mixed

Authors	Program	Aim	Research design	Participants	Key components	Duration	Method of delivery	Results
		bullied; being approached by a stranger; receiving inappropriate intimacy (with secrecy).			Secrets Strangers Coping with bullies		Discussion Drawing/painting Posters Story writing	
Oldfield et al., (1996)	Project Trust/ TOUCH	To understand sexual abuse (mainly), but also physical abuse and other related topics	Posttest only, control group design with random assignation	Children 6-12 yr: n= 1269.	Safe/unsafe touches Saying no Safe relationships Secrets Strangers Safe/unsafe adults The right to question touch	One session, 45-60 minutes	Play performed by trained high-school students	Positive
Dhooper & Schneider	School-Based Child Abuse	To increase children's understanding and	Pretest-posttest design with control group, but	Children 8-11 yr: n= 796	Safe/unsafe touches Information about abuse Telling	One session	Puppet show Work books Songs/music	Positive

Authors	Program	Aim	Research design	Participants	Key components	Duration	Method of delivery	Results
(1995)	Prevention Program	recognition of abuse (physical and sexual) and to interrupt or avoid abusive situations	without random assignation		Discriminating between abuse and normal discipline		Skits (a short comedy sketch) Question and answers session Writing letters to the puppets	
Kraizer (1991)	The Safe Child Program	To teach children about sexual abuse, prevention of abuse and abduction by strangers, prevention of physical and emotional abuse and safety for children in self-care	Pretest-posttest design with experimental and control group, using two intervention periods	Children 3-10 yr: n= 644 Parents: n= 447 Teachers: not reported	Safe/unsafe touches Saying no Safety rules Secrets Strangers Information about abuse Telling about abuse	5-10 days	Videos Role play	Positive

Apart from the mapping of the programs, additional analyses were conducted to address the key components and frequency of those components (Figure 3), the methods of instruction and frequency of those methods (Figure 4), the measurements used and the outcomes of the articles. Figures 3 and 4 include the components and methods of instruction that were used in more than one of the programs. They also report the results in terms of the eight programs that are presented in the nine articles included in this scoping review – one program (Learn to BE SAFE with Emmy™) is used in two articles. Components or methods of delivery that were used in just one of the programs are not presented in Figure 3 and Figure 4. A decision to include all articles, irrespective of research quality, was made so as not to reduce the number of articles further.
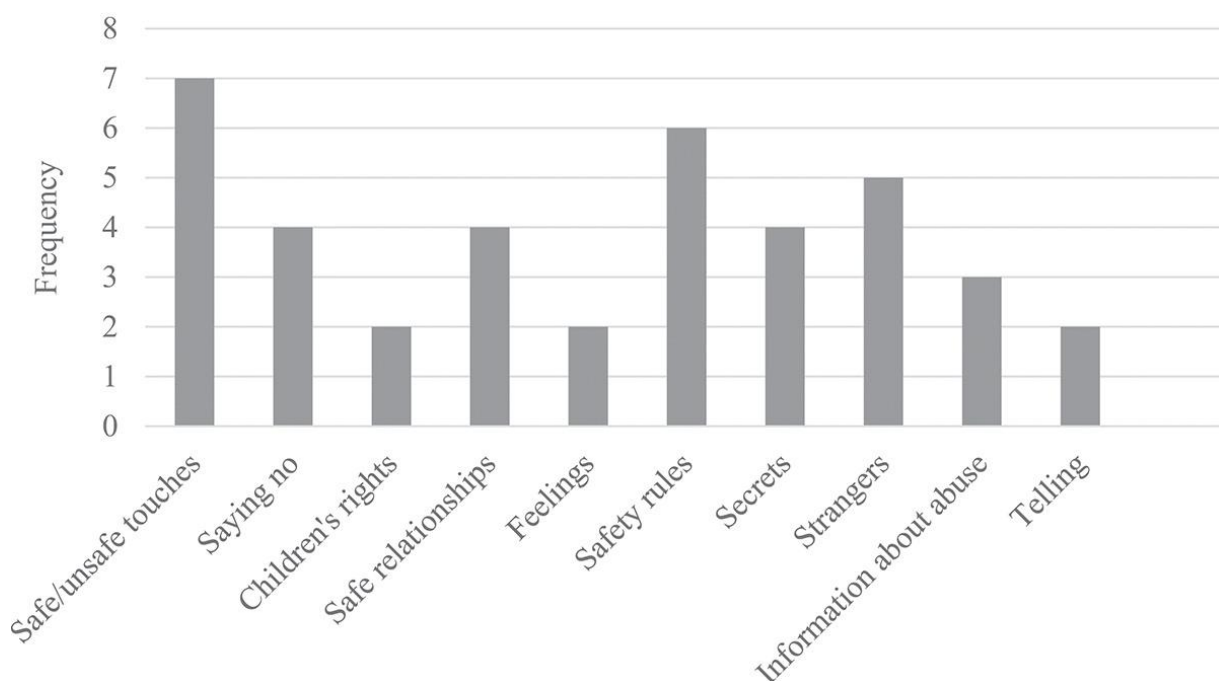

Figure 3. Frequency of key components included in the 8 programs (n = 9). Components that are only used in one program are not shown in this figure
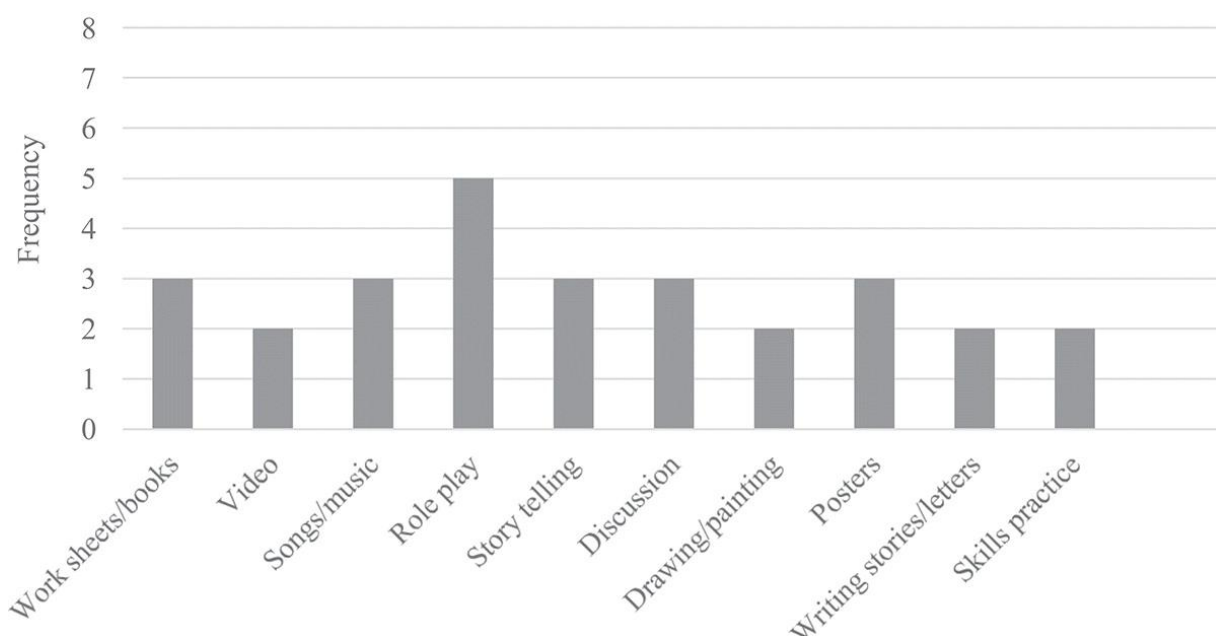
Figure 4. Frequency of instruction methods employed in the eight programs (n = 9). Methods that are only used in one program are not shown in this figure

Outcome measures

The nine articles that were included in the review included 4135 children, 1841 parents, 16 teachers and two school counsellors.

Safety skills

All the programs measured the concept of safety and/or safety skills. White et al. (2018) and Dale et al. (2016) used several instruments to measure children's self-report of safety skills. For example, they used the Protective Behaviors Questionnaire (ProBeQ), which includes items measuring important protective components such as private and public body parts and unsafe secrets. Dale et al. (2016) also used the Application of Protective Behaviors Test (APBT) (White et al. (2018) used the APBT-revised), which presents children with pictures of four scenarios and asks how they would engage in the situation – providing one safe and three unsafe options for each situation. White et al. (2018)included The Observed Protective Behaviors Test (OPBT), which is a 2-part in-vivo situation designed to assess

children's ability to implement safety skills. In addition to the child-reported measurements, parents were asked to rate children's understanding of protective behaviors using the Parent Protective Behaviors Checklist (PPBC).

Lam et al. (2018) used a child's sense of safety as the outcome measure and obtained results through asking parents to complete a custom-designed questionnaire, including questions about program exposure and perceptions of program outcomes. Moreno-Manso et al. (2014) likewise developed a custom-designed questionnaire that included several hypothetical situations of abuse, based on items concerning knowledge of different kinds of abuse, exploitation and children's rights. Leihua (1997) used interviews with children to assess safety skills and perceived competence regarding personal safety. Similar to Leihua, Warden et al. (1997) used interviews with black-and-white drawings depicting different safety situations and asked children to make decisions about safety by judging if a situation was dangerous, safe or uncertain. The answers were rated by a panel of experts using a five-point scale of how safe a child would be, depending on their response to that situation. Oldfield et al. (1996) used The Children's Knowledge of Abuse Questionnaire-Revised (CKAQ), which assesses children's knowledge of abuse prevention concepts. Dhooper & Schneider (1995) constructed a questionnaire that included questions about children's general understanding of child abuse, their ability to discriminate between discipline and child abuse, the difference between appropriate and inappropriate touch, and a proper response to situations of physical and sexual abuse.

Kraizer (1992) included several instruments to measure safety skills and developed the Children Need to Know Knowledge/Attitude Test that measures cognitive awareness, understanding and attitudes towards issues that she concluded to be generally associated with risk. Simulations and roleplay were used to measure actual behavioral change. Kraizer (1992) also subjected sixteen children to behavioral simulations to assess their real-life response to potentially dangerous situations. Parents were interviewed by telephone to determine the actual rates and patterns of self-care of the children

included in the article.

Anxiety, self-esteem and locus of control

Five articles used instruments to measure anxiety, including the Revised Children's Manifest Anxiety Scale 2nd Edition (RCMAS-2 Short Form) (Dale et al., 2016; White et al., 2018). Oldfield et al. (1996) used an older version of the same instrument, the Revised Children's Manifest Anxiety Scale (RCMAS) and The State-Trait Anxiety Inventory for Children (STAI- CH). Leihua (1997) assessed anxiety as part of the pretest-posttest interviews that were conducted to assess safety skills. Only one article (Kraizer, 1992) measured self-esteem by using Battle's Culture-Free Self-Esteem Inventory, and locus of control by using the Children's Nowicki-Strickland Internal-External Locus of Control Inventory.

Program satisfaction/evaluation

Some of the articles measured program satisfaction, usually with questionnaires that had been tailor-made for the specific article. White et al. (2018) and Dale et al. (2016) measured parental satisfaction with the program, and Dale et al. (2016) also measured teacher satisfaction. Leihua (1997) let teachers complete a 6-point Likert scale to assess each lesson in terms of ease of use; importance for children; effectiveness in teaching concepts and skills; utility of supplementary activities; comfort level with teaching lesson; children's comfort level; interest, and comprehension. In the article by Warden et al. (1997), teachers completed a follow-up questionnaire designed to assess possible differences in the presentation of the Kidscape program. The questionnaire included questions on teachers' preparation and training prior to Kidscape; training in delivering Kidscape; ease or unease with topic; timescale of the teaching of the program; teaching methods used; additional training on child safety, and children's responses to the program. At the end of the final posttest roleplay, Kraizer (1992) interviewed each child about their views of the program. Teachers completed the Teacher Knowledge/Attitudes questionnaire, which included 19 items assessing understanding, awareness and attitudes about child abuse. They also completed a demographics sheet that was used to determine differences between teachers' responses

to the training program and if their difference in skills affected children's results.

Outcomes

Eight articles reported positive results and one article reported mixed results. White et al. (2018) and Dale et al. (2016) both reported positive results, concluding that Learn to BE SAFE with Emmy™ seems to be an effective intervention for increasing children's knowledge of protective skills and behaviors. The results were maintained at follow-up and children's anxiety did not increase as a result of their participation in the program. Children's confidence in disclosure was reported to be increased in the article by White et al. (2018). There were no significant differences between the experimental and control groups in terms of application of protective behaviors in the article by Dale et al. (2016). Parents (Dale et al., 2016; White et al., 2018) and teachers (Dale et al., 2016) were satisfied with the program. Results in the article by Lam et al. (2018) were positive, and an increase in exposure to the program was associated with improvements in the perceived safety of the child in school as well as in the community. However, exposure was relatively low and low correlations were found. Moreno-Manso et al. (2014) found that children increased their knowledge of abuse and safety skills and that much of the results were maintained at the 6-month follow-up. They then concluded that stories proved to be an effective method of instruction and that schools must be involved in primary prevention.

A significant improvement of children's safety knowledge and skills for all grades was reported by Leihua (1997). The children did not experience increased anxiety due to their participation in the program and teachers were satisfied with the program. Warden et al. (1997) reported mixed results, as they found that although children in the experimental group provided more cautious and thoughtful responses to safety situations after training, similar changes were seen in the control group. The authors' hypothesized that this could be due to the evaluation process that acted as a priming effect (Molden, 2014), since the number of correct responses increased further from posttest to the follow-up two months later. The results from the teacher questionnaire also showed that the program had been

taught differently by different teachers (Warden et al., 1997). Oldfield et al. (1996) found that children in the experimental group showed significantly greater knowledge of abuse prevention information, including concepts that are difficult to acquire (e.g. saying "no" to persons of authority), than did children in the control group. This knowledge was retained at follow-up. There was a higher incidence of disclosure of abuse in the experimental group than in the control group, but there were no differences in anxiety levels between the experimental and the control group.

In the article by Dhooper and Schneider (1995). children who attended the prevention program had a significantly higher understanding of child abuse than those who did not attend, and their results increased from pretest to posttest. The control group also showed improvement from pretest to posttest, but the increase was smaller. Younger children learned more than older children – an effect that the authors suggest might be because the older children already had some knowledge of abuse. Children trained in smaller groups benefited more, with 40 being the optimum group size. Kraizer (1992) reported that the element of the program identified as being primarily responsible for producing the desired prevention skills was classroom roleplay following the video demonstrations. There were no negative side-effects of the program and fear levels of the children were reduced by 10%. A predictive correlation between self-esteem and behavioral change was associated with a reduction in risk of abuse. Explicit information about child abuse was not necessary to achieve the desired level of prevention skills. Preschool and kindergarten age children learned the skills most effectively. The skill of individual teachers did not affect the results of the children and results were retained at 6-month follow-up. Two out of sixteen children performed well on the telephone part of the stranger simulation, but none of the children performed well on the simulated package delivery activity.

Discussion

The aim of the present scoping review was to review school-based abuse prevention programs for children 7-12 years of age. To be included in the review, the programs had to teach at least two

different kinds of abuse, be directed at children and include safety knowledge and skills, empowerment or self-esteem as the outcome. After applying the inclusion and exclusion criteria to the potential articles, only nine articles remained. This shows that even though many abuse prevention programs have been developed for this particular age group, most focus on sexual abuse and only a few teach about abuse in a broader sense, such as emotional abuse and neglect. The abuse prevention programs included in this scoping review all received positive results, except for one program (Kidscape) that reported mixed results. The scientific quality of the evaluations varied greatly, from randomized controlled trials with pretest–posttest designs and 6-month follow-up, to posttest-only designs. All of the included articles used safety skills and knowledge as an outcome measure. Only one of the articles measured self-esteem or resilience (Kraizer, 1992) although some programs (e.g. Learn to BE SAFE with Emmy^{TM}) focused on these qualities when teaching children skills. Many programs included the same key components, for example safe/unsafe touches, safety rules, saying no, secrets and strangers. These components are also common in school-based child sexual abuse prevention programs (Walsh et al., 2015). Active participation by the children (such as roleplay, discussions, skills practice and work sheets) was used in several of the programs and has been highlighted as successful methods of instruction (Brassard & Fiorvanti, 2015).

Even though the articles that were included reported positive results in terms of gained safety skills in children as a result of participation in the program, the question remains as to whether the knowledge gained by the children was retained over longer periods of time. Most articles included some form of follow-up, but none of them tracked the results for longer than six months. The included articles all operated on the individual and relationship level of the social- ecological model. Few articles had a holistic focus and included teacher or parent training, even though articles like Moreno-Manso et al. (2014) suggested that future research need to include parent involvement. The social-ecological model assumes that all levels influence and relate to each other, and therefore an extensive abuse prevention

program would need to operate on all levels – including the community and societal levels – to further strengthen the program (Figure 1). None of the published programs had the latter two as focus. None of the articles in this scoping review included children with disabilities. This is concerning, considering that children with disabilities are not only three to five times more likely to be victims of violence and abuse than children without disabilities, but they are also more likely to be repeat victims of violence (Fluke et al., 2008; Jones et al., 2012; Krnjacki et al., 2016). Children with disabilities may well lack the skills to protect themselves from abuse and might not even be aware that they are being victimized, due to not knowing or understanding their rights (Wilczynski et al., 2015). They may never have received instructions on how to protect themselves against abuse, making it difficult to report possible abuse. Moreover, they could well have communication difficulties (Wilczynski et al., 2015). Helton et al. (2017) found that cognitive disabilities were associated with a risk of sexual abuse and therefore prevention efforts need to be adapted to cater for specific language and communication deficits. Other studies on abuse prevention programs such as the IMPACT: Ability (Dryden et al., 2017) (excluded from this review because it is aimed at teenagers) and the Good School Toolkit (Devries et al., 2018) (excluded from this review because of the outcome measures) have successfully included children and youths with disabilities. Wilczynski et al. (2015) propose that sexuality education for children and youths with disabilities have to include teaching them how to recognize abuse, how to say no to a perpetrator, how to get away from dangerous situations and how to disclose abuse in an appropriate way. Similar tactics need to be considered for both sexual abuse and other kinds of abuse such as physical or emotional abuse. According to Lund (2011), there is some evidence that both cognitive and behavioral interventions could be effective in teaching persons with intellectual disabilities safety skills. However, the published studies on this topic are few and have small sample sizes, leading to poor generalizability (Lund, 2011). In an article by Hasan et al. (2014) it was found that women with disabilities have low help-seeking behavior, making prevention very important. To make abuse prevention programs

available for children with communicative and/or cognitive disabilities, these programs need to be accessible and understandable. Abuse prevention programs that are used for adults with intellectual disabilities often include some sort of simulation or practicing of skills in a hands-on way (Dryden et al., 2017; Lund, 2011). The importance of adaptation of abuse prevention programs in terms of language and communication for persons with cognitive disabilities has also been noted by Helton et al. (2017). There is an urgent need for abuse prevention programs developed or adapted for children with disabilities, especially for those with communicative and/or cognitive disabilities.

Limitations of the present review

Although this review aimed to conduct a thorough review of articles on school-based abuse prevention programs for children 7-12 years old, the inclusion criteria that were used (i.e. articles that address more than one kind of abuse) could have resulted in the exclusion of some potentially relevant program. For example, articles that focused on sexual abuse but also included other prevention concepts that were not clearly alluded to in the abstract, could have been excluded. The review was also limited in terms of the search terms used. After several trial searches, the term "violence" was excluded because it did not provide relevant results. To avoid excluding potentially relevant articles in this way, the first author screened the articles excluded after the trial search on a title level. Moreover, the articles included in this review focused on a linear view of causality, whereas the social-ecological model also looks at the process and the interaction between the different levels, assuming a more complex systemic relationship. This explains why none of the articles included a measurement for long-term improvement of the children's quality of life and why the results might not necessarily be generalizable and sustainable in real-world situations. Lastly, the outcomes of the review had to include children's self-esteem, safety skills and knowledge or empowerment (as per the inclusion criteria), which also narrowed the number of articles. These outcome measures were chosen to reflect the more long-term benefits of the programs, as opposed to only looking at the short-term gains such as satisfaction with or

enjoyment of a program.

Suggestions for further research

As demonstrated by the results that emerged from this review, research on school-based abuse prevention programs for children 7-12 years old that include several forms of abuse and measure self-esteem, safety skills and knowledge or empowerment is limited. More research is needed in terms of successful program components, teaching methods and the success factors that can be pinpointed for abuse prevention programs to achieve positive outcomes. The use of several methods of instruction also have to be incorporated into abuse prevention programs, as it has been identified as a success factor (Brassard & Fiorvanti, 2015). Long-term follow-up beyond six months posttest is lacking for abuse prevention programs in general, including the articles in this review. This issue must be addressed in future research to draw conclusions about the long-term effects of participation in abuse prevention programs. Research is severely lacking on inclusive abuse prevention programs for school-aged children with disabilities, even though they are particularly vulnerable to being victims of abuse. It is possible that children with disabilities are among the participants in the articles included in this scoping review, but their disabilities have not been identified and described. This ought to be considered when planning research studies on school-based abuse prevention programs. Future research need to develop or adapt abuse prevention programs so that all children, including children with disabilities, can participate in them. Research also ought to provide for data collection methods that allow children with disabilities to participate in surveys or interviews.

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Declaration of interest

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