School-based child sexual abuse prevention programmes: The evidence on effectiveness

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Abstract

This narrative review explored the efficacy of school-based child sexual abuse prevention programmes between 1990 and 2002. There were 22 efficacy studies that met clear inclusion criteria. Results covered both methodological design and the range of outcome measures. Methodology was analysed through four dimensions (target population, prevention programme implementation, evaluation methodology and cost-effectiveness). Outcomes for children covered nine categories (knowledge, skills, emotion, perception of risk, touch discrimination, reported response to actual threat/abuse, disclosure, negative effects and maintenance of gains). The studies had many methodological limitations. Prevention programmes had a measure of effectiveness in increasing children's awareness of child sexual abuse as well as self-protective skills. Beyond minimal disclosure rates, there was no evidence to demonstrate that programmes protected children from intra-familial sexual abuse. For a small number of children prevention programmes produced minimal negative emotional effects. Recommendations for future research, policy and practice, include realistic outcomes for child participants and locating programmes within wider abuse prevention measures.

Key words

Child sexual abuse; abuse prevention; efficacy; personal safety skills; child protection; programme evaluation; victimisation

Introduction

Incidence and prevalence statistics over the last two decades indicate that child sexual abuse was a significant issue for society occurring across all socio-economic levels and in all ethnic groups (Dhooper & Schneider, 1995). Nelson and colleagues (2002) identified the long-term consequences of child sexual abuse on children's psychosocial development, including depression, suicide, interpersonal difficulties, substance misuse, anxiety disorders, delinquency and revictimisation. Similar findings were reported by Paolucci and collegues (2001) and Cicchetti and Toth (1995), the latter covering all forms of child maltreatment.

In an attempt to address these consequences, Cowen (1983) outlined two levels of prevention. Primary prevention was seen as cost-effective because it aimed to teach children how to avoid or escape abusive situations, compared with coping with the consequences of abuse. In contrast, secondary prevention sought the identification of ongoing or past abuse where children disclosed abuse during or after an abuse prevention programme. Within this context, schools became a key location for the delivery of primary and secondary prevention as they were centres for education, included the whole child population and were places where children were at risk (Finkelhor, 1984).

Prevention programmes taught children to verbally resist and tell publicly what had happened

(Reppucci *et al*, 1998). Such strategies partly evolved from sex offender studies, where offenders reported that they targeted children who they perceived as more compliant and less likely to disclose (Budin & Johnson, 1989). Programmes were therefore designed to enable children to be more assertive.

From the content of school-based abuse prevention programmes, it appeared that most programmes assumed that perpetrators were strangers, whereas the weight of evidence suggested that most sexual abuse was committed by a known abuser (Finkelhor, 1994). Evidence also existed suggesting long-term home intervention was a more effective strategy for preventing intra-familial sexual abuse than school-based abuse prevention programmes (Wolfe, 1993). At a socio-political level, Trudell and Whatley (1988) argued that prevention programmes ignored the complexities of exceedingly challenging social contexts where, at worst, the blame was inadvertently landed with the child for not having avoided the abuse or protected themselves. In other words, prevention programmes failed to recognise that the power in adult-child relationships was located with the stronger and more knowledgeable adult, and violence frequently occurred towards children because of their perceived and created vulnerability; that is, children were unable to resist, tell about or avoid abuse. Furthermore, the emphasis in programmes needed to be placed on safe adults moving to action to protect children, rather than on a naive view of children protecting themselves. The authors contested that intervention should have focused on wider social networks and not just on the children.

The difficulty in conducting meaningful programme evaluation has been highlighted by a number of authors. The secrecy of abuse (Krivacska, 1990), the documenting of the absence of abusive incidents (Ko & Cosden, 2001) and the lack of exploration of children's reactions to programmes directly with the children themselves (Finkelhor & Dziuba-Leatherman, 1995) were all seen as barriers to effective research.

Although there were many unanswered questions about the efficacy of abuse prevention programmes, a growing number were delivered in American and British schools over the 1980s and 1990s, but with little evaluation. Many of the programmes focused on the elementary school years because of the high incidence of abuse for young children (Finkelhor *et al*, 1990). Conte and Berliner (1981) found that 60% of victims were less than 12 years old, and the average age for intra-familial abuse was 10.8 years (Brassard *et al*, 1983).

Reviews of the literature

Despite the diversity and limited scope of previous traditional narrative reviews from 1990 onwards (Finkelhor & Strapko, 1992; Gough, 1993; Mayes *et al*, 1992; Miltenberger & O'Neil, 1992; MacMillan *et al*, 1994; Bevill & Gast, 1998; Miltenberger & Roberts, 1999; Carroll *et al*, 2000), evidence supported the conclusion that most children could benefit from prevention programmes through concepts learned, increased knowledge and acquired self-protection skills. MacIntyre and Carr (2000) concluded that multi-systemic programmes that focused on key adults in a child's life were more effective, that learning was best through discussion, video-modelling and behavioural methods and that children achieved more with longer programmes. However, no reviews were able to conclude that there had been an actual reduction in abuse.

Meta-analyses of efficacy studies of school-based sexual abuse prevention programmes confirmed the main findings of the narrative reviews. The most recent meta-analysis (Davis & Gidycz, 2000) reviewed 27 studies and found a large effect size[2] of 1.07. Significant effects were found for age, number of sessions, participant involvement, type of outcome measure and use of behavioural skills training. The highest effect sizes were for programmes of four sessions or more that utilised behavioural training. Rispens and colleagues (1997) examined post-test and follow-up effect sizes for 16 evaluation studies. Significant mean post-intervention (d =.71) and follow up (d =.62) effect sizes were found, which indicated that abuse prevention programmes were effective in teaching children sexual abuse knowledge and self-protection skills. The moderator variables of duration and content of the programme (intervention characteristics) and age and socio-economic status (child characteristics) impacted on effect size. The authors concluded that the amount of instruction time and explicit training in self-protection skills had an impact on effectiveness.

In contrast, Heidotting and colleagues' (1995) meta-analysis of 18 studies, spanning pre-school and school-age, found that brief prevention programmes also made an impact. A 'moderate' mean effect size was found for post-test knowledge (d =.57) and a 'medium' mean effect size was found from two weeks to one-year follow-up (d =.47). Again, active behavioural teaching methods were discovered to be more effective.

What the study involved

Definitions

Definitions of child sexual abuse across the efficacy studies examined were characterised by their omission. Out of 22 studies only two gave a definition of child sexual abuse. Pohl and Hazzard's (1990) definition from the Feeling Yes, Feeling No programme was in child-like language: '*When someone gives you the 'no' feeling by touching or looking at your private parts or having you touch or look at the private parts of their body*'. Telljohann and colleagues' (1997) definition was brief and taken from the most common elements of child sexual abuse definitions used in the US: '*non-consensual physical contact with a minor for the purpose of sexual gratification*'.

For this review, the definition was taken from the Scottish Parliamentary Cross-Party Working Group on Survivors of Child Sexual Abuse (2002):

> *Any child below the age of 16 years may be deemed to have been sexually abused when any person(s), by design or neglect, exploits the child, directly or indirectly, in any activity intended to lead to the sexual arousal or other forms of gratification of that person or any other person(s), including organised networks. The definition holds whether or not there has been genital contact and whether or not the child is said to have initiated, or consented to, the behaviour* (Scottish Office, 1998).

This definition was adopted in the local context by the education and social work sector as well as the police through the Area Interagency Child Protection Committee. This provided a degree of fit between the review reported in this article and the local practice guidelines in Scotland.

Methodology for the literature search

Computerised bibliographic searches of the Educational Resources Information Centre (ERIC) and the Social Science Citation Index utilised both general and advanced searches covering the period 1985 to 2002. This enabled an analysis of research in the latter part of the 1980s as a contrasting context for the literature review in the 1990s onward. The internet search engine Google was useful for exploring international vocabulary and grey literature. Computerised searches were supplemented by a manual search of two highly pertinent journals, namely the international journal *Child Abuse and Neglect* and also *Child Abuse Review*. Thirty-nine key words were identified from papers and bibliographic searches, ERIC's thesaurus of search terms, Web of Knowledge key word lists and publications and reference lists on the internet. One of the authors was the sole rater for the inclusion of articles in the study.

Inclusion criteria

Efficacy studies were included where: the focus and aims of programmes were the prevention of child sexual abuse; there was a formal structure to the evaluation with a specified assessment of outcome; the target population was sub-samples representative of the whole school population; and the paper was published in English. Studies were not included if they were solely with pre-school children children with disabilities, or where the focus was solely on teacher and parent experiences of such programmes. As such, teacher and parent experiences and outcomes were not included in this review. The 22 studies were characterised by their diversity, defined by five dimensions: target population, programme implementation, evaluation methodology and outcomes for children (***Table 1***). Geographically the picture was similar to the 1980s, when the bulk of studies occurred in the US and Canada. European and antipodean studies were of a small number, with only one study in the UK.

Participants

In comparison to research in the 1980s, where participants were often less than 100 and often drawn from one or two schools resulting in experimental/control contamination effects (Hazzard *et al*, 1991), sample sizes had increased. Around a third of studies had participant numbers of over 500. About a third of studies did not report on gender balance, although nearly all studies had male and female participants. Studies included a broad range of participant age and stage of development (age five years to adulthood), although most examined the efficacy of elementary school age (four to 11 years) programmes and were weighted towards the early years. No studies looked exclusively at secondary school age (11 to 18 years) programmes, although three studies explored the cumulative impact of repeated exposure (Finkelhor & Dziuba-Leatherman, 1995; Casper, 1999; Ko & Cosden, 2001). Socio-economic status was characterised by omission and inconsistent labelling, and the location (urban/rural/suburban) of participants was weighted towards urban populations. Ethnicity was not always reported, although most participants were Caucasian.

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Table 1: Evaluation studies of child sexual abuse prevention programmes

Study	Target population					Prevention programme				Evaluation methodology implementation					
Author, date and country	**Participants: number /gender**	**Age and/or grade**	**Socio-economic status**	**Urban, rural, suburban**	**Ethnicity (%)**	**Named programme**	**Type of intervention**	**Number and length of sessions**	**Programme presenter**	**Type of evaluation study**	**Pre-test / post-test design**	**Control group**	**Evaluation tools**	**Programme integrity check**	**Cost-effectiveness**
Pohl & Hazzard, 1990 USA	526 263m 263f	3rd 4th	-	Urban	65 white 27 black 5 Hispanic 3 Oriental	Feeling Yes: Feeling No	Video Comic Role-play discussion Structured exercises	Three 1 hour classes	Professional staff	Evaluation of child focused programme	Y	N	Questionnaire Silent questions box Random selection for interview Parent and teacher questionnaire	N	-
Blumberg *et al*, 1991 USA	264 139m 125f	K 1st 2nd 3rd	Mean income 30,000	-	51 white 18 black 17 Hispanic 7 Asian 7 Other	1 STOP 2 CAPPP	1 Role-play 2 Multi-media	1 hour	1 trained volunteer 2–4 teachers, counsellor, school nurse	Comparison of programmes	Y	Y	Touch disc task (vignettes) Interviews Fear survey Sexual abuse Knowledge index	N	-
Hazzard *et al*, 1991 USA	399 % 50m 50f	3rd 4th	Low middle to upper middle	-	Matched	Feeling Yes: Feeling No	Video Group discussion Role-play	3 sessions	Mental health professionals	Evaluation of multi-system programme	Y	Y	Knowledge scale Anxiety Inventory Video vignettes Disclosure data	N	-
Tutty, 1992, 1994 Canada	400 - m - f	1st 3rd 6th	-	-	Control group > Canadian born parents	Touching	A play group discussion	1 session 45 mins	Theatre group	Evaluation of child-focused programme	Y	Y not random	Children's Knowledge of Abuse Questionnaire (CKAQ)	N	-

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Madak & Berg, 1992 Canada	833 - m - f	K/ 1st to 6th	Working class	Urban	-	Talking about Touching	Photograph Vignettes Discussion	15 lessons	Teachers	Evaluation of child-focused programme	Y	N	Questionnaires short vignettes Interview	N	-
Hensley & Soled 1993 (Gerndal, 1991) USA	100 % 45m 55f	2nd	-	-	87.5 white 12.5 African and American	Body safety training	-	1 session 50mins	-	Evaluation of child-focused programme	Y	N	What if situations test Personal safety Questionnaire and interview	N	-
Dziuba-Leatherman & Finkelhor, 1994 USA	44 44mo f	10 to 16 yrs	-	-	white	-	-	-	-	Survey – evaluation of child focused programme	Post-test	N	Interview perceived likelihood of sex abuse (PLSA)	N	-
Briggs & Hawkins, 1994a, 1994b Australia/ New Zealand	378 - m - f	5 to 8 yrs	-	-	Diverse cultural and ethnic mix	1. Protective behaviours 2. Keeping ourselves safe	1. Group discussion 2. Group discussion Video	1. 8 sessions 2. 12 sessions	Teachers	Comparison of programmes	Y	N	Questionnaire and interview	N	-

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Jacobs & Hashima, 1995 USA	75 - m - f	2nd 6th	Lower/ lower middle 81% employed	Small mid-west community	95 Native American	Talking about Touching	Picture cards Discussion	26 sessions	Teachers	Evaluation of child-focused programme (risk perception)	Y	N	Interview (base rate estimates) Video vignettes Situational risk measure	N	-
Dhooper & Schneider, 1995 USA	796 % 51m 49 f	3rd 4th 5th	Variety of levels	Semi-urban	Mainly black or white	Kids on the Block	Puppet show Question and Answer Song	1 session	-	Evaluation of child-focused programme.	Y	Y non equivalent	Questionnaire	N	-
Finkelhor *et al*, 1995, 1995b USA	2000 1042m 958 f	10 to 16 yrs	Nat. Rep.*	Nat. Rep.*	Nat. Rep.*	-	-	-	-	Survey – Evaluation of child-focused programmes	Post-test	Comparison no programme group	Telephone interview 30mins to 1 hour	N	-
Sylvester, 1996 USA	133 66m 67f	K 1st 2nd 3rd	10 to 90% free school meals	Urban Rural Sub*	80 white 20 range	Talking about Touching	Video story Audio cassette Poster Discussion	10–20 mins 6–8 weeks	10 Teachers and 2 school counsellors	Evaluation of child-focused programme.	Y	N	Interviews Photographs of hypothetical scenarios Pupil and teacher surveys	N	-

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Oldfield *et al*, 1996 USA	1269 598m 671f	1st 2nd 3rd 4th 5th 6th	-	Urban	91 white 3 African American 3 Hispanic 1 Asian American	Project TRUST: Touch	Play presented Pre-post discussion	1 session 30 mins play 15 mins Q & A	Teachers High school students Facilitators	Evaluation of child-focused programme	Post-test	Y Random	CKAQ – R Anxiety Inventory Disclosure Report Form	N	-
Taal & Edelaar, 1997 Holland	292 76m 85f	6th 7th 8th	Matched	-	-	Right to Security	Presentation plays Role-play Discussion	8 sessions 30 mins to 1 hour per session	Two sessions by facilitators Four sessions by teachers	Evaluation of child-focused programme	Y	Y	6 Questionnaires	N	-
Tutty, 1997, 2000 Canada	231 - m - f	K 1st 2nd 3rd 4th 5th 6th	33% Semi skilled 27.5% Prof* 19.2% Tech. 19.2% Business	-	8 East Indian 2 Latino 2 black	Who Do You Tell	Discussion Pictures Video Role-play Discussion	2 sessions 45 mins to 1hour per sessions.	Two Programme trainers	Evaluation of child focused programme	Y	Y Random	CKAQ - R	N	-
Telljohann *et al*, 1997 USA	431 220m 211f	3rd	-	Rand.* Urban Rural Sub*	Mostly white	-	Role-play Videos Demonstration Discussion	2 sessions 1hour per session	Trained volunteers & social service staff	Evaluation of child focused programme.	Y	Y	Questionnaire	N	-

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Warden *et al*, 1997 United Kingdom	120 % 50m 50f	P2 P6	Matched	Urban	-	KID-SCAPE	Video Role-play Discussion Poster	Various 10 to 20 sessions.	Teachers	Evaluation of child focused programme.	Y	Y Random & Matched	Drawings with story line Interview	Y	-
McIntyre & Carr, 1999a, 1999b Ireland	772 % 55m 45f	7y 10y	-	-	-	Stay Safe	Group discussion Video Behaviour training	12 sessions 40 mins per session.	Teachers	Evaluation of multi-system programme	Y	Y	CSKS* Questionnaire Self-Esteem inventory	N	-
Casper, 1999 USA	382 – 503 - m - f	2nd 5th 6th	-	-	-	Touch Continuum	Discussion Vignette presentation	1 session 45mins	Amateur actors & trained facilitators	Evaluation of child focused programme. (Children's characteristics)	Y	N	CKAQ – R – II Locus of Control Scale Anxiety Scale	N	-
Gibson & Leitenberg, 2000 USA	825 o m 825f	16 to 28 yrs	University undergraduates	Parents msb*	95 White	-	62% participated in Good touch/ bad touch type programme	-	-	Survey – Evaluation of child focused programmes.	Post-test	Comparison no programme group	Questionnaire Childhood Sexual Experience Scale Sexual Functioning Inventory	N	-

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Herbert *et al*, 2001 Canada	133 - m - f	1st 3rd	Middle income	-	-	ESPACE	Role-play Guided discussion Behavioural modelling and rehearsal	1 hour to 75 mins	3 female community workers	Evaluation of child focused programme.	Y	Y	CKAQ Video vignette measure	Y	-
Ko & Cosden, 2001 USA	137 83m 54f	9th	-	-	53 European American 25 Hispanic 22 Native American	-	Discussion Role-play Pencil & paper activities	K – 1 to 2 hours 4th – 1 to 2 hours and follow-up session.	Trained Professionals	Evaluation of child focused programmes.	Post -test	Y	Questionnaire	N	-

CSKS* = Children's Safety Knowledge and Skills Questionnaire Prof.* = professional Sub* = suburban msb * = medium sized business
Nat. Rep* = National representative sample Rand.* = random

Programme implementation

A wide range of different programmes were evaluated (18 in total), with a lack of replicated studies; that is, only two programmes were evaluated in more than one study (Feeling Yes, Feeling No; and Talking about Touching). In contrast to research in the 1980s where a number of studies examined the effectiveness of different intervention strategies (Dezseran & Myerson, 1985 – theatre; Byers, 1986 – films; Wurtele, 1986 – behavioural rehearsal; Garbarino, 1987 – Spiderman comic; Wurtele, 1987 – participant modelling; Poche *et al*, 1988 – TV), few studies in the 1990s compared the merits of different intervention strategies. Blumberg and colleagues (1991) and Briggs and Hawkins (1994) were the exceptions. The former compared a role-play experience with a multi-media presentation and Briggs and Hawkins compared video training with group training.

Learning from the lessons in the 1980s, programme intervention in the 1990s tended to involve some form of modelling, experiential learning and behavioural skills rehearsal. Over half the studies used role-play and/or video vignettes. All programmes included discussion. Some programmes used picture cards, posters, comic strips, prevention songs and worksheet exercises. Programme content varied across the studies but certain core themes recurred, for example: helping children recognise child sexual abuse and other abuses; teaching children to say no or avoid unwanted approaches; encouraging children to tell an adult; letting children know that they were not to blame; distinguishing between appropriate and inappropriate touching, and between good and bad secrets; and strategies to reduce the likelihood of being abused. Despite the wide range in the number and length of sessions, most programmes involved one or two sessions that lasted 45 minutes to an hour. A variety of presenters led the programmes, including teachers, facilitators, school counsellors, mental health professionals and community workers. Most of the programmes were presented by teachers or teachers with trained facilitators. None of the studies examined 'presenter' as an interactional variable.

Johnson (1994) noted that outcomes should not be evaluated before an evaluation of programme integrity. Only two studies in the review evaluated this dimension. Herbert and colleagues (2001) audio-taped the workshops and Warden and colleagues (1997) used a follow up questionnaire with teachers and discovered a diversity of presentation.

The type of evaluation also distinguished the different efficacy studies. The majority were of child-focused programmes. A small number were large surveys of children's experience, some were evaluations of multi-systemic programmes and over half the studies had a follow-up component. Only two studies reported failed programmes and these used a '*comparison of treatment*' design (Blumberg *et al*, 1991; Briggs & Hawkins, 1994), where at least one of the programmes delivered a significant difference.

There was a spread of different types of study design. In the 1990s, fewer studies used a post-test only design compared to those in the 1980s. The most rigorous studies (Tutty, 1997; Warden *et al*, 1997) used a strong pre-test/post-test design and a random allocation of participants to an experimental condition and a waiting list control group. Other studies that used a strong pre-post test design with control group were: Blumberg *et al*, 1991; Hazzard *et al*, 1991; Tutty, 1992; Dhooper & Schneider, 1995 (non comparison control); Taal & Edelaar, 1997; Telljohann *et al*, 1997; McIntyre & Carr, 1999a; and Herbert *et al*, 2001. Studies without control groups made it impossible to judge whether participants had improved because of the pre-test or because of the programme.

A wide range of evaluation tools was used. Few measures were used over more than one study and few were assessed for their psychometric properties, the Children's Knowledge of Abuse Questionnaire (CKAQ) being the exception. Many of the questionnaires were short (eg. seven to 13 items), which raised doubts about the validity and reliability of the evaluation of complex child protection concepts. Blumberg and colleagues (1991) found that the use of short, narrow, focused measures with older children often resulted in a ceiling effect with high levels of scoring at pre-test.

Across the studies there was a lack of clarity in terms of attrition rates, which were often not communicated at all. MacIntyre and Carr (1999a) provided an example of good practice as a benchmark for future research, which included attrition rates at pre and post-test and follow-up. Otherwise, though, it was not known how those who did not take part or dropped out differed in their reactions to programmes compared to those who remained in the studies.

The cost-effectiveness part of the review sought to address the question: were abuse prevention programmes worth the money? Given the significance of personal safety for children, the limited focus of abuse prevention programmes and their evaluations and the budgetary considerations for local authorities, this was an important area for the research to cover. Unfortunately none of the studies

reported on this dimension. So, the review was unable to come to any conclusions with regard to programme cost-effectiveness.

Outcomes

A key issue from analysis of the efficacy studies was: what were the outcome evaluations measuring? Across the studies, outcome measures included personal safety knowledge (including prior knowledge, child development and conceptual learning), self-protection skills, subjective experience and emotional gains, perceptions of risk, disclosure rates, maintenance of knowledge and skills, negative effects and child characteristics. ***Table 2*** displays the above measures across the 22 studies and summarises each type of gain as a percentage of the studies that report a gain.

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Personal safety knowledge gains

Despite the diversity of participants, study design, tools for measurement and type of intervention, nearly all studies found a small but significant knowledge gain; that is, an increase on average in children's awareness of the risks of abuse, as well as strategies for personal safety. Tutty (1992) raised the question of how to make sense of small average gains and suggested that not only knowledge but also attitudes about people were being assessed. In a later study Tutty (1997) highlighted the need to measure the clinical significance of change for individual children.

Another reason for the small gains in knowledge was the extent to which children had prior knowledge of abuse prevention concepts. Tutty (1994) discovered that prior to experiencing programmes even the youngest children held core prevention concepts. High pre-test scores were found for the concepts '*say no to unwanted touch, that it is not your fault if touched in a way that makes you feel uncomfortable and that you should tell a trusted adult if this should occur*'. Similar findings were reported by others (Blumberg *et al*, 1991; Hazzard *et al*, 1991; Telljohann *et al*, 1997; Warden *et al*, 1997). Hazzard and colleagues (1991) suggested the possibility of a volunteer effect, whereby schools that were motivated to adopt a prevention programme were also more likely to have created a school ethos in which safety measures were highlighted before the programme was delivered.

Although specific concepts had been identified through pre-testing across a range of studies, there continued to be variability and uncertainty with regard to which concepts at what age were understood. Few factors which influenced children's levels of prior knowledge had been identified and no studies had sought to identify how children had learned their prior knowledge and where this knowledge had come from.

Only a small number of studies explored the efficacy of programmes for different age groups and none of the studies in the review examined different methods to teach different ages of children. Studies that had systematically compared children's responses from different age groups discovered that older children consistently learned more concepts and younger children knew consistently fewer prevention concepts at pre-test (Hazzard *et al*, 1991 [third and fourth grades]; Tutty, 1992 [first. third and sixth grades]; Oldfield *et al*, 1996 [first to sixth grades]; Tutty, 1997 [kindergarten through to sixth grade]). Tutty (1994) suggested that the ability to learn was likely to be linked to developmental differences.

Self-protection skills

Most programmes were based on the assumption that knowledge changed children's behaviour and that the behaviour change resulted in reduced abuse and harm (Reppucci *et al*, 1998). Of the studies reviewed, most used narrow pencil and paper tests to assess skill acquisition, and the psychometric properties of these tests were rarely known. Cormack and colleagues (1998) commented that such assessment tools had been seriously criticised in the wider educational literature for being a simplistic and invalid way to assess a complex issue.

In the 1980s, a study by Fryer and colleagues (1987a, 1987b) applied an in-vivo simulation technique , whereby a confederate posing as a stranger tried to get children to leave the school grounds. The research found a reduction from about 50% of the experimental group (kindergarten through to second grade) who left with the stranger pre-test to 22% who left post-test. There was no comparative reduction for the control group. The programme used role-play and the teaching of specific strategies for children. However, this study was criticised on ethical grounds for running the risk of desensitising children to abduction (Conte, 1987).

Vignettes offered a more realistic methodology than questionnaires and avoided the ethical dilemma of real-life simulations. These were presented in different ways – a written narrative, videotape, audiotape or puppets and/or plays of dangerous

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Table 2: Evaluation studies of child sexual abuse prevention programmes (Outcomes)

Study	Outcomes for children								
Author, date and country	Personal safety knowledge gains	Self-protection skill gains	Emotional gains	Perception of risk gains	Touch discrimination	Reported response to actual threats	Disclosure rates	Maintenance of gains	Negative effects
Pohl & Hazzard (1990)	-	-	Y	-	-	-	6.5%	N	-
Blumberg *et al* (1991)	1 Y 2 N	1 Y 2 -	-	-	1 Y 2 N	-	-	-	-
Hazzard *et al* (1991)	Y	Y	Y	-	-	-	< 5%	N	Y 6 w & 1y
Tutty (1992, 1994)	Y	-	-	-	Y	-	-	-	Y 5m
Madak & Berg (1992)	Y	-	-	-	-	-	1%	Y	-
Hensley *et al* (1993)	Y	Y	-	-	N	-	-	-	Y 1y
Dziuba-Leatherman & Finkelhor (1994)	-	-	-	N	-	-	-	Y	-
Briggs & Hawkins (1994, 1994b)	1. N 2. Y	1. N 2. Y	-	-	-	-	4.3%	N	1. N 1y 2. Y 1y
Jacobs & Hashima (1995)	Y	-	-	Y	-	-	-	N	Y 2m
Dhooper & Schneider (1995)	Y	-	-	-	-	-	0.3%	-	-
Finkelhor *et al* (1995a, 1995b)	Y	Y	Y	-	-	Y	P = .01	Y	Y 37% within last year
Sylvester (1996)	Y	Y	-	-	-	-	-	N	-
Oldfield *et al* (1996)	Y	-	-	-	-	-	0.4%	N	Y 3m
Taal & Edelaar (1997)	-	Y	Y	-	Y	-	-	Y	N 6w
Tutty (1997, 2000)	Y	-	-	-	Y	-	-	Y	-
Telljohann *et al* (1997)	Y	Y	-	-	-	-	-	-	-
Warden *et al* (1997)	Y	-	-	Y	-	-	-	-	Y 2–3m
McIntyre & Carr (1999a, 1999b)	Y	Y	Y co	-	-	-	Y	Y	Y 3m
Casper (1999)	Y	-	Y		-	-	-	Y	Y 3y (previous exposure)
Gibson & Leitenberg (2000)	-	Y	-	-	-	8% versus 14%	-	N	-
Herbert *et al* (2001)	Y	Y	Y	-	-	-	-	Y	Y 2m
Ko *et al* (2001)	Y	Y	-	-	-	Y	-	-	Y into H.S
Total percentages % (i)	75 Y 8 N	50 Y 4 N	32 Y 0 N	10 Y 5 N	18 Y 9 N	14 Y 0 N	36 Y 0 N	36 Y 32 N	52 Y 9 N

situations. Children watched the vignettes and suggested their safety responses. Seven studies out of 22 used vignettes, four of which reported significant skill gains.

For example, Herbert and colleagues (2001) found that elementary school-aged children better identified '*appropriate behaviour*' when confronted with situations depicted on video vignettes compared to waiting list controls. Hazzard and colleagues (1991) reported that mid-elementary children (eight to nine years old) discriminated 'safe' from 'unsafe' situations better on a video measure compared to the control group. The authors concluded that a programme that involved '*an affective component as well as concrete rules and behavioural rehearsal*' (p135) appeared to be effective. Blumberg and colleagues (1991) discovered that kindergarten through to third grade three (ages five to eight years) improved in touch discrimination following a programme that involved role-play, and Hensley and Soled (1993) used the 'what if situations test' and identified positive results for skill gains for second grade children (aged seven years).

Another form of evaluation used was children's reported behaviour in real-life situations. Finkelhor and Dziuba-Leatherman (1995) conducted a telephone survey of a large national sample of children aged 10 to 16 years that was representative of different cultures, classes, ethnicity and backgrounds to ascertain the reported behavioural outcomes as a result of experiencing abuse prevention programme(s). Young people who reported having experienced a programme were more likely to have reported using self-protection strategies and perceived themselves as more effective, and were more likely to have disclosed that abuse had occurred. The authors concluded that comprehensive programmes with comprehensive parental instruction were the most effective. A less promising outcome was that once children had been threatened they were less likely to stop the abuse. Even more concerning was that young people reported that they suffered significantly more injuries when they fought back. Methodological limitations included the facts that the evidence was based on retrospective reports of abuse experienced (some several years earlier), the survey tools were not psychometrically validated and families without a phone were excluded from the survey.

Whereas Finkelhor and Dziuba-Leatherman (1995) examined children's responses to reported threats and assaults, Gibson and Leitenberg (2000) explored whether children who experienced a prevention programme showed different rates of victimisation compared to those who received no programme. They assessed 16 to 28-year-old female undergraduate students and discovered that girls who participated in a prevention programme disclosed sooner. They also found that girls who reported that they had not experienced a prevention programme were twice as likely to have been sexually abused. Research limitations were similar to those in the Finkelhor and Dziuba-Leatherman (1995) study: in particular, the research design was retrospective, so participants may have forgotten events – which could have lead to under-reporting – and perhaps some who were abused may have wanted to deny that they participated in a prevention programme. Results were not generalisable given the specificity of population, namely upper middle class white undergraduate women.

In conclusion, children who had experienced prevention programmes appeared to attain higher scores on average on post-test questionnaires examining abuse prevention skills than children who had not experienced a programme. Questionnaires alone, however, provided no evidence for the transfer of skills into real-life settings or indeed for the safety of children. Instead they measured the 'behavioural intentions' of children rather than children's actual moving to action.

That said, there was some indications that prevention programmes might have led to behaviour change through evidence from adults reporting retrospectively their use of safety strategies. There was also an indication that taught self-protective behaviours led to increased safety through reduced victimisation, although there was not the research to support such conclusions. There is clearly a need to identify a methodology that could measure both children's resultant safety behaviour in the real world, as well as their actual safety from harm, as a result of children using their taught safety strategies.

Emotional gains

Just over a third of the studies reported emotional gains for participants who experienced a prevention programme. These gains tended to be reported as percentages of either children's responses or the adult's observations of the child. The few formal tools used were an anxiety inventory, self-esteem inventory and a locus of control scale. There was a lack of qualitative studies seeking to explore children's subjective experiences of such programmes.

A range of positive emotional experiences were uncovered: children were more positive towards safe scenes (Hazzard *et al*, 1991), and more self-confident, assertive and likely to talk more about likes and dislikes (Herbert *et al*, 2001), and reported

a greater sense of efficacy in using self-protective skills (Finkelhor *et al* 1995); younger children were less socially anxious (Pohl & Hazzard, 1990; Taal & Edelaar, 1997); self-esteem increased for the seven-year-olds (MacIntyre & Carr, 1999a); and younger children with higher levels of anxiety reported that they felt that they had learned what to do if touched inappropriately (Casper, 1999). Taal and Edelaar (1997) found that young children liked appropriate touch more after the programme, a finding that challenged parental concerns that programmes increased children's anxiety about appropriate touch.

In summary, there appeared to be a range of positive emotional benefits for children. There was a need for psychometrically rigorous tools to have measured the differences as these were lacking in studies. Such measures would have enabled the size of the positive emotional differences to be quantified. Further, studies tended to rely on adults' reports of children's experiences rather than asking the children directly, and there was a slight bias towards checking for negative experiences rather than exploring a range of children's emotional reactions.

Perception of risk

Reppucci (1987) clarified that many prevention programmes were based on untested assumptions, such as children not being aware of the risks of sexual abuse, and suggested that there was a need to know about children's prior beliefs about risk before delivering programmes. A number of researchers attempted to clarify why the perception of risk was a difficult concept to learn. Morris (1970) postulated that children might struggle to understand the definition of risk itself – '*the possibility of suffering harm or loss*'. Children's deterministic reasoning may not fit well with predicting uncertain and harmful events (Piaget & Inhelder, 1975), and Kraiser (1986) suggested that children found it difficult to connect negative events to the people they knew.

Only a small number of studies looked at participants' perceptions of risk. The results were mixed and, as such, inconclusive. Different methodology and evaluation tools were used, which made it difficult to make comparisons. Dziuba-Leatherman and Finkelhor (1994), in a boys only study, highlighted a possible danger of school-based prevention programmes that increased boys' sense of controllability of sexual abuse, as this appeared in their research to lead to a reduced perception of the risk of abuse. The authors proposed that perceived risk was partly based on cultural stereotypes about male sexuality; in other words, boys were brought up to believe that being a man meant being in control and that the more control there was the lesser the risk. However, this reflected a naïve view on the perceived relationship between control and risk.

Jacobs and Hashima (1995) discovered that prior to the prevention programme children had high levels of perception of risk and that following the programme their risk perception of strangers increased further. However, children's risk perception of specific scenarios shown on videotape was described as quite low. There was an age effect for younger children (second grade – aged seven years), who held lower risk perceptions both prior to and following the programme than older children (sixth grade – aged 11 years). Of concern was that the factors children used to assess risk were not necessarily the real risk factors. Jacobs and Hashima (1995) concluded that '*even if children understand the overall risks of abuse, without some appropriate information about risks in different situations and with different kinds of people they are not likely to be able to recognise when to use behaviours learned in prevention programmes*' (p1454).

Finally, Warden and colleagues (1997) found that both children who experienced a prevention programme and also those in the control group increased their wariness of four different situations, namely being bullied, being approached by a stranger, inappropriate intimacy from a known adult and pressure not tell. The authors commented that this might have been due to the process of assessment as this heightened children's awareness of the issues.

Disclosure rates

Finkelhor and Strapko (1992) described disclosure rates as the easiest to measure and least ambiguous of the outcomes used in programme evaluation. An increased rate of disclosed grooming and threats of abuse constituted primary prevention, whereas increased disclosure of ongoing or previous abuse constituted secondary prevention. Disclosed abuse enabled protection measures to be taken and therapy to be provided, and reduced the likelihood of long-term consequences for children (Sauzier, 1989).

Finkelhor (1990) affirmed that most survivors never told of their abuse in childhood and that many who disclosed had been abused for some years beforehand (see also Gomes-Schwart *et al*, 1990). Summit (1983) explained such a response as the '*accommodation syndrome*', which comprised five categories: secrecy, helplessness, entrapment and accommodation, delayed unconvincing disclosures

and retraction. Hollinger (1987) clarified that young children did not understand what the adult was doing, and Farrell (1988) identified the age of the victim, the seriousness of the abuse and the relationship to the perpetrator as issues that impacted on the nature of a child's disclosure.

Sgroi (1982) made the distinction between purposeful and accidental disclosures. Sorensen and Snow (1991), meanwhile, in a retrospective examination of 630 children who had disclosed abuse, found that most disclosed by accident (74%) and that accidental disclosures were more frequent in younger children.

Just over a third of the studies reported on disclosure rates. Many gave overall disclosure rates rather than separate figures for the experimental and control groups, or reported that disclosures occurred but gave no figures (Dhooper & Schneider, 1995). For those studies that did indicate the difference, children who experienced prevention programmes reported higher rates. Such disclosures were reported as being characterised by a lack of false allegations (Oldfield *et al*, 1996). Hazzard and colleagues (1990) found that there was little difference in the disclosure rate, regardless of whether the programme was presented by a teacher or an outside expert consultant. Teachers, however, needed to be well trained.

Understanding the meaning of disclosure rates was less than clear. An increase in disclosures could be explained in two possible ways: either the programme had been effective in encouraging children to tell, or the abuse rates had risen. Equally, a reduced disclosure rates could mean that abuse had gone down or that the programme had failed to create a climate that enabled children to tell.

Pelcovitz and colleagues (1992) concluded that disclosure rates following prevention programmes had not been sufficiently documented. Systematic reporting would have included the percentage of children who disclosed, how children disclosed and to whom, the timings of disclosures, the type of disclosures and the different rates for the experimental and control groups. In addition, since disclosures were often an outcome of prevention programmes, it was important that schools and the appropriate child protection services were aware of the beginning of such programmes in order to ensure an appropriate and planned response (Pohl & Hazzard, 1990).

In conclusion, studies were inconsistent in their reporting of disclosure. Some did not report on disclosures at all. Where disclosures occurred and were reported, the numbers of disclosures were small. Despite the implementation of abuse prevention programmes, there continued to be a significant discrepancy between incidence and prevalence figures. Internationally, prevalence rates ranged from six per cent to 62% of the female population reporting some form of sexual victimisation compared with three per cent to 24% of the male population. In comparison, incidence statistics for child protection substantiated cases were 2.4 per 1,000 in the US (Faller, 1993). There was little evidence to suggest that the knowledge and behavioural intention gains identified through questionnaire assessment actually transferred into significant behaviour change (telling behaviour) in the classroom setting or beyond school in the home and community settings.

Maintenance of gains

Studies in the 1980s provided some evidence of skill retention at six weeks (Hazzard *et al*, 1988), at three months (Saslawsky & Wurtele, 1986) and at six months (Kolko *et al*, 1987; Wurtele *et al* 1987; Gallmeier *et al*, 1988; Kolko *et al*, 1989). Researchers who conducted follow up studies and looked at individual items found more mixed results (Kolko *et al*, 1987).

Although some earlier research had found little evidence for the impact of booster sessions (Ray & Dietzel, 1984; Gallmeier, 1988), the value of such sessions for improved safety discrimination scores was highlighted by more recent studies (Hazzard *et al*, 1991; Tutty, 1997), with Briggs and Hawkins (1994) concluding that the reinforcement of abuse prevention skills was core in terms of longer-term skill maintenance.

Just over half the studies covered maintenance of prevention programme effects over periods ranging from six weeks to transfer to high school (at 13 years of age). Some studies showed that knowledge gains were maintained at two, three and five months after the programme (Jacobs & Hashima, 1995; Oldfield *et al*, 1996; Taal & Edelaar, 1997; Warden *et al*, 1997; McIntyre & Carr, 1999a). By contrast, Warden and colleagues (1997) found that unrehearsed knowledge gains tended to be lost at two to three months, whereas in the Herbert and colleagues (2001) study, skills decayed at two months yet were still at higher levels than pre-test.

Some studies reported on the knowledge gains that were maintained at one-year follow-up. Briggs and Hawkins (1994) at a one-year follow-up found that participants had retained their knowledge and increased their safety strategies. The authors suggested that this continued progress might have been due to teachers and parents continuing to reinforce concepts. Low-income families in socially disadvantaged environments made the least progress.

Hazzard and colleagues (1991) discovered that knowledge gains and the ability to discriminate safe from unsafe situations were maintained and again increased slightly at one-year follow-up. The authors suggested that maturation in cognitive and reasoning skills, as well as parents and teachers continuing to talk about prevention, might have contributed to increased gains.

Ko and Cosden (2001) looked at the maintenance of gains over a longer period of time by following up pupils who had received prevention programmes in elementary school. They identified that most high school students had retained core knowledge about abuse, although the students' skill level was found to be variable. High school students were found to have better understanding of more sophisticated issues such as the attribution of blame, the notion that abusers could be people close to the victim and the fact that both boys and girls could be victims, as well as recognising the need to report abuse.

The issue of maintenance of knowledge and skills was important, as the risk of abuse occurred throughout childhood. There were mixed results in the research in terms of follow-up, with knowledge and skill gains being maintained for varying lengths of time across some studies compared to a small number of studies that failed to demonstrate maintenance. Few studies identified the specific concepts that were difficult for pupils to retain. In addition, the issue of children's application of skills in real-life situations was not addressed at follow-up.

Negative effects

A range of studies in the 1980s identified children's negative reactions to prevention programmes, such as increased anxiety and the misunderstanding of content (Garbarino, 1987; Hazzar*d et al,* 1988; Kraiser, Witte & Fryer, 1989; Reppucci & Haugaard, 1989). As a consequence, some studies began to include measures to assess any negative effects of having participated in a prevention programme (Binder & McNeil, 1987; Garbarino, 1987; Wurtele *et al*, 1987).

Between 1990 and 2002, over half the efficacy studies reported on negative effects for participants as a result of having experienced a prevention programme. Authors have reported these effects as small in number, mostly mild in nature and of short duration. For example, Herbert and colleagues (2001) noted that negative behaviour might be time-limited as part of an adaptation phase, where children practised their skills in real-life situations.

When the range of negative effects was listed from the studies in the review it became apparent that negative effects were not an insignificant issue. The meaning of this finding was less clear. Seven themes were identified as negative outcomes from the abuse prevention efficacy studies in this review. These were:

- anxiety and dependency (Finkelhor & Dziuba-Leatherman, 1995; Tutty, 1997; Herbert *et al*, 2001)
- fear towards strangers (Hazzard *et al*, 1991; Finkelhor & Dziuba-Leatherman, 1995; Pohl & Hazzard, 1990; MacIntyre & Carr, 1999a; Herbert *et al*, 2001);
- aggression (Herbert *et al*, 2001; McIntyre & Carr, 1999a)
- embarrassment about talking about 'private parts', and feeling upset by stories of a family member touching a child's private parts (Pohl & Hazzard, 1990; Hazzard *et al*, 1991; Tutty, 1997)
- wariness of touch (Taal & Edelaar, 1997; Casper, 1999; McIntyre & Carr, 1999a)
- greater extent of injury when children defended themselves from sexual assault (Finkelhor *et al*, 1995)
- perceived likelihood of being sexually assaulted reduced rather than increased for boys (Dziuba-Leatherman & Finkelhor, 1994).

Studies that examined negative effects tended to be based on parental or teacher observations rather than on asking the children themselves (Finkelhor & Strapko, 1992). In checking for negative effects, some studies found no difference between the experimental and control conditions. Significantly, these were the studies that used psychometric measures. This could be explained either in terms of the tools not being sensitive enough to detect differences that existed or that the negative reactions from children were put into perspective, for example, it being normal to feel some anxiety in potentially risky situations. Given that only a very small number of studies assessed the possibility of any negative impact in a standardised and psychometrically tested way, there is a clear need for more systematic research in this area.

In summary, a range of negative experiences were identified for a small number of children who had participated in an abuse prevention programme. There was no evidence to suggest that the anxiety experienced by some children was overwhelming. It was also unclear whether the reported anxiety was a result of the programme, the evaluation measures or the methodological limitations of the studies. Some authors went on to suggest that a degree of anxiety was helpful as this may have helped some children to be more alert to the dangers. However, most children did not show increased levels of anxiety following participation in an abuse prevention programme.

Child characteristics

In addition to clarifying the characteristics of children in relation to negative effects of prevention programmes, Casper (1999) addressed the characteristics of children in relation to positive outcomes. Older children with lower anxiety and an internal locus of control were positively associated with higher scores following a prevention programme. Children who were younger and who felt more anxious, however, were more likely to report that the abuse prevention programme enabled them to 'learn what to do if touched inappropriately'. Casper discovered that these characteristics predicted outcomes for children with an accuracy of about 63%.

Other authors also sought to discern whether child factors impacted on the level of knowledge and skills gains but had little success (Hazzard *et al*, 1991; Briggs & Hawkins, 1994; MacIntyre & Carr, 1999a). However, Briggs and Hawkins (1994) discovered that children defined as middle class made more progress in knowledge and skills compared to children with low economic status, even though the latter started with less knowledge. Children from middle class homes with active parental involvement and teachers who were willing to incorporate safety knowledge into their day-to-day teaching made most progress.

Although the majority of studies found no overall difference in gender response to prevention programmes, a few studies reported that girls learned and retained more of the material (Hazzard *et al,* 1991; Finkelhor & Dziuba-Leatherman, 1995). McIntyre and Carr (1999b) found that more female participants disclosed abuse as a result of the Stay Safe programme, although Oldfield and colleagues (1996) noted that girls scored higher anxiety scores. It would appear that there was enough variation in the outcomes to suggest that there may have been subtle differences in which boys and girls received an abuse prevention programme. It has yet to be discerned, however, what it was about some programmes that led some girls to learn more, disclose more and feel more anxious.

It was impossible to come to any conclusions in terms of ethnicity because of the lack of relevant studies. The lack of any evidence of any academic effects on outcomes may have meant that it was appropriate to deliver abuse prevention programmes to whole classes. Evidence from studies that looked at age differences and the capacity of children to learn child protection concepts indicated that prevention programmes needed to be developmentally appropriate and thus adapted across the childhood age range.

The research into child characteristics as a moderating factor on the impact of school-based child sexual abuse programmes has been minimal and narrow in focus. Although a number of potential moderating factors were identified, there was insufficient research to come to any firm conclusions.

Conclusions

The design limitations of studies included in this review were many. There were insufficient studies with control groups and few studies randomly allocated participants to experimental and control conditions. There was a wide variety of outcome measures and few standardised measures. Despite the methodological limitations, most researchers indicated that their results showed that school-based abuse prevention programmes had a measure of effectiveness in increasing children's awareness and, possibly, skills in relation to child sexual abuse. There was no evidence, however, to demonstrate that these programmes protected children from intra-familial sexual abuse other than at a secondary prevention level of disclosure. Some researchers argued that the disclosure of abuse was the most valid and reliable measure of these programmes. Even within this context, there was still a big discrepancy between disclosure rates following prevention programmes compared to prevalence figures. Pelcovitz and colleagues (1992) warned about making the assumption that just because children had experienced a prevention programme they were safe from harm.

Since 2002, there have been no substantive evaluations of specific child sexual abuse programmes, although a meta-analysis by Bolan and Scannapieco (2003) questioned the effectiveness of such programmes in actually reducing child sexual abuse. In contrast, a more recent study has called into question Bolan's and Scannapieco's findings. Finkelhor and Jones (2006) reported on over a decade of national US substantiated child sexual abuse cases up to 2004, clearly indicating a reduction in incidence of child sexual abuse since the implementation of abuse prevention programmes. The authors were tentative, however, in making a causal link between prevention programmes and the apparent decline in child sexual abuse.

Overall, studies in the review reported in this article indicated that prevention programmes led to small average gains in self-protective knowledge, with the likelihood of a range of individual response. It was proposed that such small gains might have been due to surprisingly high levels of prior knowledge that

children brought to programmes or that the efficacy studies had really measured attitudes and beliefs that were more embedded in children's thinking and thus more difficult to change. Indications were that the amount of prior learning with parents varied with socio-economic status and environmental deprivation. Some studies found that some self-protection concepts were more difficult for all children to learn. One concept that occurred across a number of studies was that children found it difficult to understand that trusted adults including family members could abuse.

The gaining of knowledge was seen as a necessary prerequisite to action but not sufficient in itself to keep children safe. Some research referred to an attitude/behaviour discrepancy, whereby children's reports of behavioural intentions did not always fit with their behaviour in the actual situation. However, from a national study in the US (Finkelhor *et al*, 1995), indications were that children who had experienced a prevention programme were more likely to use the self-protective strategies they had learned on the programme and felt more confident about doing so. Other studies provided very little evidence to suggest that this reduced the likelihood of sexual abuse, although there was some evidence to suggest that children might disclose earlier. Changes in children's perception of risk were difficult to assess as studies were minimal and mixed in quality and outcome.

There were sufficient follow-up studies to suggest that knowledge gains tended to be retained up to a year after a short duration programme. Skill gains, as measured through behavioural intentions, were less conclusive because of the small number of studies as well as the mixed results. Active parental and teacher involvement both during and following the prevention programme potentially led to further small average gains in knowledge. A small number of studies examined the repeated exposure to prevention programmes and booster sessions, and indications were that these might have enhanced further learning. Some concepts appeared to be more difficult to retain than others, notably abuse by someone the child knows.

Most children reported the programmes as enjoyable, but for a small number prevention programmes seemed to generate anxiety. It was unclear what role this anxiety played in the development of self-protective behaviour. Such negative feelings were elusive to statistical tests of significance. As previous researchers concluded, it appeared that anxiety and other negative feelings were mostly mild and of short duration.

Finally, even though the review involved an in-depth analysis of children's outcome measures across the studies, the potential broader impact of such programmes still needs to be explored in a systematic and thorough manner. Outcomes such as awareness-raising for parents, teachers and the wider community, the development of prevention practices, the professional response to suspicion and disclosure of abuse (Finkelhor & Daro, 1997), the consequences of disclosure for children, the creation of more 'sensitive' environments for children's experiences (Finkelhor, 2007) and the impact on peer violence (Wekerle & Wolfe, 1999) are all areas for future research.

Recommendations for policy and practice

Recommendations fit into four main categories. Given the small number of studies on this side of the Atlantic, these recommendations are particularly relevant, although not exclusive, to the UK context.

Nature of evaluation

Given the limited evidence of programmes preventing child sexual abuse or enabling children to disclose abuse, benefits for children need to be clarified, realistic and explicitly stated. Likewise, there should not be an over-reliance on school-based prevention programmes alone, but also a focus on developing programmes, which (a) address perpetrators motivation and behaviour (Finkelhor, 2007), (b) provide parent education and (c) seek to change the societal culture (eg. social construction of childhood, gender roles, awareness raising of abuse) in which the abuse of children thrives (Finkelhor & Daro, 1997). For school-based programmes, evaluation should be built in through providing teachers with materials to assess children's pre- and post-programme knowledge and skills.

Training for teachers

Training should be provided for teachers that takes into account their attitudes and gives them the opportunity to explore their concerns about delivering programmes. Teachers should receive training in how to respond appropriately to disclosures.

Context for programmes

Teachers should be involved in the planning of delivering a programme to enhance ownership, and programmes need to be delivered within a supportive school context. Child protection agencies need to be alerted to when a programme is being delivered in order to ensure a planned response to disclosures.

Programme effectiveness

Children should be provided with sufficient information to make informed choices about disclosure, and a range of contextualised scenarios, taking into account the power differential and the child's feelings, should be included. Programmes need to be comprehensive in nature (including parents, teachers and community involvement), with many sessions repeated annually, including booster sessions. Sufficient repetition of concepts and additional input/discussion for difficult-to-learn concepts is necessary. Programme materials should be targeted for each age and stage and teaching and learning approaches should involve modelling, an affective component and behavioural skills training. Parents need to be actively involved in the programme, building on what parents already teach about self-protection.

Recommendations for future research

Given the limited quality of studies, the narrow focus of outcome measures, the poor recording of the nature and type of disclosures and the omission of programme integrity measures, recommendations are made for continuing research in this area.

Research design

Due to population sizes there is a need for larger scale studies (over 1,000 participants) and demographic factors need to be reported in a standardised way in order to be analysed as interactive factors. Research designs are needed with pre- and post-test valid and reliable psychometric measures, with random allocation to programme and waiting list control groups. Studies that compare different intervention methods are rare and would help to tease out what is and is not effective.

Publication of the results from evaluations of failed as well as successful programmes may also aid knowledge of effectiveness factors. There is a need to clarify the impact of different programme presenters on children's outcomes, along with an examination of a range of child characteristics and how these interact with programme factors, including children's perception of risk. Finally, there is a need to compare the effectiveness of school-based programmes with other initiatives such as community-wide campaigns, teacher/parent training and home visitation.

Evaluation measures

There is a need to clarify what the range of benefits is for children, along with a measure of cost-effectiveness. Programme integrity measures are essential to clarify what is actually being evaluated and should be core to future studies. There has been little examination of wider school factors in programme effectiveness. Questions still exist around the extent to which the duration of sessions impacts on learning, and the impact of cumulative programmes on children, and there is a need for an examination of which items are most difficult to retain. A broader examination of children's emotional changes, including the development of psychometric measures, is necessary, and qualitative studies are needed to explore children's subjective experiences of abuse prevention programmes.

Participants

More efficacy studies with high school aged participants are needed, and the questions of how children who have been abused or who have disabilities respond to programmes have yet to be addressed.

Although the above recommendations describe a variety of separate research issues it is suggested that evaluation of the interaction of the above factors will be of most significance.

Summary of policy and practice implications

There is a need for:

- evaluation to be built into abuse prevention programmes through providing teachers with materials to assess children's pre- and post-programme knowledge
- training for teachers that takes into account attitudes and gives them the opportunity to explore concerns about delivering programmes
- teachers to be involved in the planning of programmes to enhance ownership
- programmes to be delivered within a supportive school context and wider abuse prevention initiatives
- child protection agencies to be alerted when a programme is being delivered to ensure a planned response to disclosures
- training for teachers in how to respond to disclosures
- children to have information to make informed choices about disclosure

Summary of policy and practice implications (continued)

There is a need for:

- a range of contextualised scenarios to be provided, taking into account the power differential and the child's feelings
- comprehensive programmes (parents, teachers and community involvement) over many sessions repeated annually, including booster sessions
- age and stage materials with sufficient repetition of concepts and additional input for difficult-to-learn concepts
- approaches that include modelling, feelings and behavioural skills training
- active parental involvement in programme delivery.

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Endnotes

[1] An effect size is a standard measure of the strength of a treatment effect. Effect sizes of around 0.2 are considered to indicate a small effect, 0.5 medium and 0.8 or above large.

[2] An in-vivo simulation technique refers to a method that attempts artificially to replicate a real-life situation for the purposes of research.

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