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CHILD SEXUAL ABUSE PREVENTION PROGRAMS: EVALUATING *WHO DO YOU TELL*

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ABSTRACT

Objective: The research evaluated a sexual abuse prevention program for elementary school-aged children. Although other evaluations of similar programs have demonstrated significant improvements in knowledge and skills, a number of key questions with respect to their efficacy remain.

Method: 231 children were randomly assigned (matched by age) to participate in the program ($N = 117$) or in a wait-list control condition ($N = 114$). Knowledge of abuse prevention concepts were tested using the 33-item Children's Knowledge of Abuse Questionnaire-Revised (CKAQ-R), a standardized measure with strong psychometric properties (Tutty, 1995), with a new subscale on Appropriate Touch.

Results: An analysis of covariance showed that children who received the program increased their knowledge levels of both Inappropriate Touch ($p = .000$) and Appropriate Touch ($p = .012$) to a significantly greater degree than children in the control group. Age also significantly differentiated the knowledge levels regarding Inappropriate Touch, with younger children knowing fewer concepts both at pretest and posttest ($p = .000$). Parallel results apply to the Appropriate Touch subscale ($p = .04$).

Conclusions: The results are consistent with other evaluations of child sexual abuse prevention programs, however the statistically significant though small gains suggest that the programs need to be presented in a more powerful manner.
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INTRODUCTION

AS EVIDENCE INCREASES that child sexual abuse is not the rare occurrence it was once thought, prevention has become the focus of a generation of worried parents and professionals. With participation in a sexual abuse prevention program, it is hoped that children can be safeguarded from the often long-term and severe consequences of such abuse (Bagley & Young, 1990). Finkelhor and Browne (1985) conceptualize the trauma as not only reflected in sexual distress, but in difficulties with trust, feelings of stigmatization, and powerlessness.

Diverse prevention strategies have been developed for various target audiences including offenders, potential victims, parents and the professionals who must deal with disclosures and treatment (Tutty, 1991). Child-directed abuse prevention programs have been widely adopted

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across the western world (Kohl, 1993), however relatively few have been evaluated (U.S. General Accounting Office, 1996; Wurtele, in press).

This paper briefly reviews the research on the efficacy of child-directed abuse prevention programs and identifies critical gaps in our understanding of how such programs work. The results of a study of the knowledge gains of elementary school-aged children after having participated in the *Who Do You Tell* program are presented and discussed in terms of ways to improve the impact of child-directed prevention programs in general.

In the past decade, over 40 research articles on child-directed prevention programs have been published (for reviews see Daro, 1994; Reppucci & Haugaard, 1993; Tutty, 1990a, 1996; Wurtele & Miller-Perrin, 1992; Wurtele, in press). Of these, at least 16 focused on the more controversial programs for preschool and kindergarten-aged children, while another 16 assessed programs directed to elementary school-aged children. As with the preschool programs, the results of the research on prevention programs for older children have yielded consistent findings, although, as befits a new area of research, some of the early studies on the efficacy of such programs were exploratory in nature and did not utilize research designs that included large samples, control groups, or the statistical analysis of total test scores. Ten well-designed outcome studies of programs developed for elementary school-aged children that included control groups (Blumberg, Chadwick, Fogarty, Speth, & Chadwick, 1991; Conte, Rosen, Saperstein, & Shermack, 1985; Dhooper & Schneider, 1995; Fryer, Kraiser, & Miyoshi, 1987a; Harvey, Forehand, Brown, & Holmes, 1988; Hazzard, Webb, Kleemeier, Angert, & Pohl, 1991; Oldfield, Hays, & Megel, 1996; Saslawsky & Wurtele, 1986; Tutty, 1992; Wolfe, MacPherson, Blount, & Wolfe, 1986) all found statistically significant gains in knowledge and/or skills. Consistent with this, Berrick and Barth's 1992 meta-analysis of the research on prevention programs reported large effect sizes for both preschool programs ($d = .86$) and elementary school programs ($d = .98$), providing further strong statistical support. Nevertheless, these improvements are typically an increase in only one or two prevention concepts.

One of the greatest concerns about child-directed prevention programs, especially on the part of parents, has been whether children would experience negative side-effects such as fear or nightmares. Researchers have consistently found that only a small minority of children show negative reactions after participating in a child abuse prevention program (Nibert, Cooper, & Ford, 1989; Tutty, 1990b; Wurtele & Miller-Perrin, 1987).

In a U.S. national incidence phone survey of 2,000 10–16-year-olds, Finkelhor, Asdigian, and Dziuba-Leatherman (1995) reported that, across programs, the more comprehensive the material or the more programs attended, the higher the child scored on a short test of knowledge of prevention concepts. The authors note that "This is the first study to suggest that, when children with prevention training do actually get victimized or threatened after their program exposure, they can behave to some extent in ways envisioned by prevention educators" (p. 150). Although this research was not program-specific, taken in conjunction with the previously reviewed research, the question of whether child-directed school-based programs result in children's learning may be considered by some as receiving initial support.

In contrast, a recent report to the Subcommittee on Crime of the Committee of the Judiciary, House of Representative of the U.S. Government (U.S. General Accounting Office, 1996) that surveyed 16 research reviews on the efficacy of child-directed sexual abuse prevention programs concluded that the evidence to date is inconclusive. Three methodological considerations were raised: the lack of outcome that directly assesses children acting in ways to prevent abuse; limitations in the outcome measures used (lack of evidence for psychometric properties); and design limitations such as lack of control groups or random assignment to conditions. This report clearly called for continued research.

Relevant Questions for Further Research

In addition to conducting better designed research, other problems in the evaluation of child-directed sexual abuse prevention programs for elementary school-aged children are apparent. These include a general lack of consideration of age differences in children and little research comparing different programs and modalities to teach prevention concepts to children of varied ages. In the few studies with control groups that compared the responses of children from different developmental groups, older children consistently learned more of the concepts than younger children (Conte et al., 1985 [4–5 & 6–10 years]; Oldfield et al., 1996 [Grades 1 through 6]; Saslawsky & Wurtele, 1986 [Kind/Gr.1 & Gr. 5–6]; Tutty, 1992 [Gr. 1, Gr. 3, Gr. 6]). With such clear age-differences in response to programs, developmental issues ought to be considered in both the planning and the evaluation of programs, as has been suggested by Daro (1991), Pelcovitz, Adler, Kaplan, Packman, and Krieger (1992), and Tutty (1994). However, few studies, an exception being Oldfield and colleagues (1996), collected information from children from all grades within elementary schools, a procedure that would assist in clarifying whether age-differences follow a particular pattern that might suggest changing how prevention concepts are offered.

As mentioned previously, a large number of formats and venues have been utilized to teach children prevention concepts. Some programs are integrated into the curriculum and are taught by teachers over a number of weeks as compared to other programs presented in one or two hour sessions, offered by outside consultants. While Wurtele, Marrs, and Miller-Perrin (1987); Wurtele, Kast, and Melzer (1992); Wurtele, Kast, Miller-Perrin, and Kondrick (1989); Wurtele, Gillespie, Currier, and Franklin (1992); and Hill and Jason (1987) have compared program variables (such as parent versus teacher as presenter; the addition of practice components) for preschool-aged children, only Hazzard, Kleemeier, and Webb (1990); and Tutty (1990b) have studied program variables related to elementary school-aged children. The Hazzard and colleagues' 1990 study compared teacher versus expert consultants as presenters, finding no differences. Tutty (1990b) found that repetition of the concepts in supplementary sessions added significantly to children's learning in a comparison of Grade 3 students. Further research comparing the efficacy of such program formats would be invaluable and can be most clearly accomplished either by research that compares different formats or programs or utilizing standardized measures so that results can be compared across studies.

The outcome variables used as evidence that programs are successful have been a matter of debate. The two most commonly utilized outcomes for testing the efficacy of child abuse prevention programs are knowledge of abuse prevention concepts and behavioral change. Ideally, information about both behavior and knowledge would be collected to demonstrate that prevention programs are working as planned. However, there are insurmountable problems using behavioral change to assess the efficacy of sexual abuse prevention programs. Behavioural change is typically measured by simulating a potentially abusive situation, with a stranger approaching a child and requesting that he or she accompany the adult under the guise of helping in some manner (Fryer, Kraiser, & Miyoshi, 1987a, 1987b; Poche, Brouwer, & Swearingen, 1981). One of the major concerns about using this method of validating programs has been the ethics of such a simulation (Conte, 1987). However, since the majority of perpetrators of sexual abuse are known to the victim, and sexual touch would obviously not be appropriate to simulate, such methods are not appropriate with respect to sexual abuse prevention programs. Although it must be admitted that knowledge gain is limited to the extent that one cannot be certain that it will translate into changed behavior, it remains the initial criteria to evaluate whether or not a program is teaching the material it purports to.

Few standardized measures have been developed to assess knowledge gain with respect to child abuse prevention concepts and even fewer of these have been validated or demonstrated to be reliable (Tutty, 1995). Many of the questionnaires are very short, from 7 to 13 items. It is

questionable whether, given the complexity of the prevention concepts, learning could be adequately assessed using such brief measures. With older children, the use of short measures not uncommonly resulted in a ceiling effect (Blumberg et al., 1991; Swan, Press, & Briggs, 1985). The availability of psychometrically-sound standardized measures would greatly assist the comparison of different programs and formats.

That children may over-generalize knowledge about inappropriate touch to positive touch represents one of the major fears of both parents and professionals with respect to prevention programs (Anderson, 1996). Little research has systematically evaluated children's knowledge of appropriate touch to ensure that children do not misconstrue such touches as abusive after being in prevention programs. Although many evaluations assess appropriate or "benign" touch as it is described by Liang, Bogat, and McGrath (1993), most do so utilizing only 2 or 3 items or vignettes (Dhooper & Schneider, 1995; Hazzard et al., 1991; Wurtele et al., 1987). As assessed by Liang and colleagues (1993), benign items do not typically improve significantly after participation in a program, and in a cluster analysis, these authors concluded that the items appear conceptually unrelated to items about skills in sexual abuse situations. Blumberg and colleagues (1991) developed research with seven vignettes (four dealing with appropriate touch; three with inappropriate touch). Although the children in their study knew much of the information regarding inappropriate touch at pretest, they had difficulty identifying appropriate touch. After participating in a prevention program, these children significantly improved their ability to identify appropriate touch. Thus, it may be that knowledge about appropriate touch constitutes a different variable than knowledge about inappropriate touch and should be assessed separately.

When one includes the above concerns with the more commonly cited problems with research design such as the lack of random assignment to conditions, it becomes clear that we should not too quickly come to the conclusion that child sexual abuse prevention programs are effective and that further research is not warranted.

METHOD

The current study offered the opportunity to utilize a strong research design (experimental pretest-posttest) to look systematically at age-differences in a relatively large number of elementary school-aged children from grades one to six, utilizing a psychometrically sound measure of abuse prevention concepts. Two hundred and thirty-one children participated in the *Who Do You Tell* program, first introduced by the former Calgary Sexual Assault Centre in 1983, and recently updated and re-introduced by the Calgary Communities Against Sexual Assault. The program is offered at the request of elementary school principals. Like many similar programs, parents are invited to an information evening and the teachers receive an in-service workshop and direction about how to proceed should disclosures occur.

Two trainers offer the program in small groups (15 to 20) to children from kindergarten to grade six. Parental permission is required. The program is delivered to children in two sessions of 45–60 minutes each, presented on consecutive days. Slightly different formats are utilized for the youngest children (kindergarten to grade 2), the middle grades (3 & 4), and the older children in grades 5 and 6 in the sense that age-appropriate materials and videos are matched to the developmental level of the child. Prevention concepts are taught with the aid of discussion, pictures, short videos, and role-plays. While the emphasis is on giving information and permission to say no to unwanted touch, the issue of whether this means that children should be suspicious of all touches or adults is also addressed. Following the presentations, children are given the opportunity to ask for individual time to talk to the presenters. The concepts and process presented are similar to many other child-directed prevention programs (Tutty, 1995). The opportunity to role-play situations and to practice using the concepts, however, is an aspect that has proven important.

Measure

The knowledge levels of abuse prevention concepts were tested using the 33-item Children's Knowledge of Abuse Questionnaire-Revised (CKAQ-R), a standardized measure that was developed for elementary school-aged children in grades one through six. The CKAQ-R uses a true-false format and has strong psychometric properties (Tutty, 1995). The measure was administered verbally to all participants by the author. The children in grades one and two received an individual administration, while the older children responded to the measure in groups of from 5 to 15.

The revised version includes a new 9-item subscale on Appropriate Touch, including such issues as the fact that sometimes doctors may need to see a child's private parts, and that if lost, it is appropriate to ask a security guard for help even if he is a stranger. To date, there is psychometric data on only the Inappropriate Touch Subscale.

The 24-item Inappropriate Touch Subscale consists of the strongest items identified by factor analysis from the 40-item original scale. The internal consistency ($KR-20$) is an alpha of .87, strong internal reliability. Item-to-corrected-total correlations were above .300, clearly in the range suggested as acceptable by Nunnally (1978). One month test-retest reliability was established as .88. Norms for the Inappropriate Subscale show no significant differences in scores on the basis of gender for any age-group of children, nor was the overall effect of gender significant ($t = .75$; $p = .46$). Differences on the basis of age did, however, reach statistical significance ($F = 155.4$; $p = .000$) such that the younger children had consistently lower scores on the measure than older children.

In the current study, a parent survey was sent home with the children to gather information about demographic characteristics and feedback regarding the children's reaction to having participated in the prevention program.

Research Design

The research utilizes a pretest/posttest experimental design. Children were randomly assigned (matched by age) to participate in the program ($N = 117$) or in a wait-list control condition ($N = 114$). The two subscales of the CKAQ-R were analyzed separately with an analysis of covariance controlling for the pretest scores, grade (age), and gender.

RESULTS

Participants

Two hundred and thirty-one children who received parental permission were involved in the current research. These children attended two elementary separate (Catholic) schools in Calgary, a western Canadian city of approximately 800,000. About half of the parents ($N = 124$, 45.6%), primarily mothers (87.9%), provided information about the demographics of their families. The majority of the families included both parents, with only four currently sole parent-led families; one with joint custody, three mother-only and one father-led. The fathers were employed in semi-skilled (33%), professional (27.5%), business (19.2), or skilled/technical jobs (19.2%). Of the mothers, 31% were full-time home-makers, 27.4% worked in skilled/technical jobs, 25% worked in semi-skilled positions, and 10% worked as professionals. The racial background of most of the families was Caucasian (88%). Other groups represented included Oriental or East Indian (8%), Latino (2%), and Black (2%). This proportion is representative of the make-up of the community.

Data Analysis

Because the two subscales of Inappropriate and Appropriate Touch were developed for different reasons (one to identify improvement; the other to identify the possibility of negative effects), they were first analyzed separately.

Table 1. Analysis of Covariance on Inappropriate Touch Subscale Scores

Variable	DF	Mean Square	F	Significance Level
Covariate				
Pretest	1	868.35	223.4	.000
Main Effects				
Condition	1	77.57	19.96	.000
Grade	5	27.42	7.05	.000
Gender	1		.001	.976
2-way Interactions				
Condition $\times$ Grade	5	6.7	1.7	.127
Explained	24	120.37	30.9	.000
Residual	206	3.89		
Total	230	16.04		

To simplify the presentation, an additional three interactions with gender as a variable were not included in the table since none resulted in significant findings. These figures are available from the author upon request.

Total $N = 231$.

The core analysis is the comparison of posttest scores on the Inappropriate Touch Subscale. The data were analyzed with analysis of covariance controlling for pretest score. Grade and gender were additional variables. As can be seen in Table 1, children who participated in the prevention program scored significantly higher at posttest than children in the wait-list condition. Grade was also significant such that older children consistently scored higher on average than younger children. Gender was not a significant factor. The interaction between grade and condition did not reach statistical significance, suggesting that not all grades of children in the treatment condition significantly improved their knowledge of sexual abuse prevention concepts when compared to children of the same grade in the control condition. In investigating the scores broken down by grade (see Table 2), it is clear that children in both the prevention program and the wait-list control condition improved on the CKAQ-R at posttest. While this could be as a result of receiving the pretest, importantly, children who were in the prevention program raised their scores to a significant degree beyond the improvement noted in the wait-list group. In addition to the sensitizing effect of the pretest, the improvement of the children in both groups may be because children asked questions of parents or other adults.

As noted previously, the statistical comparison of children's scores on the Appropriate Touch subscale was not so much to identify improvement, but to check that children did not deteriorate in their understanding of what constitutes appropriate touch from familiar adults such as parents and teachers. As can be seen in Table 3, in contrast to the Inappropriate Touch subscale scores at pretest, the children all answered many more of the Appropriate Touch items correctly.

Table 2. Average Scores on Inappropriate Touch Subscale by Grade and Condition

Gr.	Pretest		Posttest	
	Control	Treatment	Control	Treatment
1	13.7 (57.1%) $SD = 3.6$ $N = 20$	14.5 (60.4%) $SD = 3.7$ $N = 18$	13.8 (57.5%) $SD = 3.3$	16.5 (68.8%) $SD = 4.4$
2	17.6 (73.3%) $SD = 3.4$ $N = 20$	15.7 (65.4%) $SD = 3.5$ $N = 20$	19.1 (80.0%) $SD = 3.9$	18.5 (77.1%) $SD = 2.9$
3	18.6 (77.5%) $SD = 4.1$ $N = 22$	19.3 (80.4%) $SD = 2.4$ $N = 24$	19.8 (82.5%) $SD = 4.1$	22.1 (92.1%) $SD = 2.0$
4	21.9 (91.3%) $SD = 2.4$ $N = 17$	20.8 (86.7%) $SD = 2.9$ $N = 17$	23.2 (96.7%) $SD = 0.8$	22.2 (92.5%) $SD = 2.8$
5	21.1 (87.9%) $SD = 3.3$ $N = 17$	21.9 (91.3%) $SD = 3.3$ $N = 21$	21.2 (88.3%) $SD = 2.9$	23.2 (96.7%) $SD = 1.0$
6	22.1 (92.1%) $SD = 1.6$ $N = 18$	22.4 (93.3%) $SD = 1.7$ $N = 17$	23.3 (97.1%) $SD = 1.3$	23.4 (97.5%) $SD = 0.6$
All	19.0 (79.2%) $SD = 4.4$ $N = 114$	19.0 (79.2%) $SD = 4.1$ $N = 117$	19.8 (82.5%) $SD = 4.4$	21.1 (87.9%) $SD = 3.5$

Note. Total possible score is 24; total $N = 231$.

Table 3. Average Scores on Appropriate Touch Subscale by Grade and Condition

Gr.	Pretest		Posttest	
	Control	Treatment	Control	Treatment
1	7.9 (87.8%) <i>SD</i> = 1.4 <i>N</i> = 20	8.1 (90.0%) <i>SD</i> = 0.8 <i>N</i> = 18	7.5 (83.3%) <i>SD</i> = 1.6	8.4 (93.3%) <i>SD</i> = 0.9
2	8.2 (91.1%) <i>SD</i> = 0.8 <i>N</i> = 20	7.7 (85.6%) <i>SD</i> = 1.2 <i>N</i> = 20	8.5 (94.4%) <i>SD</i> = 0.6	8.5 (94.4%) <i>SD</i> = 0.8
3	8.0 (88.9%) <i>SD</i> = 1.3 <i>N</i> = 22	7.7 (85.6%) <i>SD</i> = 1.4 <i>N</i> = 24	8.1 (90.0%) <i>SD</i> = 1.1	8.2 (91.1%) <i>SD</i> = 1.4
4	8.0 (88.9%) <i>SD</i> = 0.9 <i>N</i> = 17	8.0 (88.9%) <i>SD</i> = 0.7 <i>N</i> = 17	8.4 (93.3%) <i>SD</i> = 0.8	8.4 (93.3%) <i>SD</i> = 0.6
5	7.1 (78.9%) <i>SD</i> = 1.4 <i>N</i> = 17	8.3 (92.2%) <i>SD</i> = 0.9 <i>N</i> = 21	7.9 (86.7%) <i>SD</i> = 1.4	8.7 (96.7%) <i>SD</i> = 0.5
6	7.0 (77.8%) <i>SD</i> = 1.8 <i>N</i> = 18	8.3 (92.2%) <i>SD</i> = 0.9 <i>N</i> = 17	7.9 (87.8%) <i>SD</i> = 0.9	8.7 (96.7%) <i>SD</i> = 0.6
All	7.7 (85.5%) <i>SD</i> = 1.3 <i>N</i> = 114	8.0 (88.9%) <i>SD</i> = 1.1 <i>N</i> = 117	8.1 (90.0%) <i>SD</i> = 1.1	8.5 (94.4%) <i>SD</i> = 0.9

Note. Total possible score is 9; total *N* = 231.

Nevertheless, the analysis of covariance does indicate a significant difference at posttest for condition and grade (see Table 4). Similar to the results with the Inappropriate Touch subscale, both children who participated in the prevention program and children in the wait-list condition improved their scores on average on the Appropriate Touch Subscale.

Finally, while the analysis of the total CKAQ-R scores will not be presented in a table, the results parallel the findings of the two subscales with significant differences in condition ($p = .000$) and grade ($p = .000$) but not gender ($p = .93$). Importantly, though, there was a significant interaction between grade and condition ($p = .05$), suggesting that children of different grade levels who participated in the prevention program consistently improved their knowledge levels to a greater degree than children matched from the same grades who were in the control condition. The total CKAQ-R scores by grade level and condition can be seen in Table 5.

In looking at the levels of change, children in the control condition improved an average of 1.5 ($sd = 1.8$) items on the Inappropriate Touch Subscale in comparison to 2.5 ($sd = 2.8$) items for children in the prevention program. It is of interest to note that simple exposure to the pretest resulted in improved posttest scores. In the control group, 19 children lost one point or more (up to -7 points) at posttest, 25 did not change and a number (70 or 61%) improved their score up to six points, although two-thirds (66%) of those who improved added one or two points only. In contrast, among the children in the prevention program, three lost 2 points and 5 lost one point for a total of 8 children losing ground. Twenty-six (22.2%) did not change. Eighty-three (70.9%) improved with 20 gaining one point, 14 two points, and 18 three points, with the highest improvement noted at 13 points.

Table 4. Analysis of Covariance on Appropriate Touch Subscale Scores

Variable	<i>DF</i>	Mean Square	<i>F</i>	Significance Level
Covariate				
Pretest	1	68.36	97.9	.000
Main Effects				
Condition	1	3.29	4.7	.031
Grade	5	1.6	2.3	.044
Gender	1		.001	.978
2-way Interactions				
Condition $\times$ Grade	5	.728	1.04	.39
Explained	24	4.3	6.17	.000
Residual	206	.699		
Total	230	1.08		

Total *N* = 231.

Table 5. Average Scores on CKAQ-R Total Score by Grade and Condition

Gr.	Pretest		Posttest	
	Control	Treatment	Control	Treatment
1	21.6 (65.3%) <i>SD</i> = 4.0 <i>N</i> = 20	22.6 (68.5%) <i>SD</i> = 4.0 <i>N</i> = 18	21.3 (64.5%) <i>SD</i> = 4.1	24.9 (75.8%) <i>SD</i> = 4.7
2	25.8 (78.0%) <i>SD</i> = 3.2 <i>N</i> = 20	23.3 (70.6%) <i>SD</i> = 2.9 <i>N</i> = 20	27.6 (83.6%) <i>SD</i> = 2.7	27.5 (83.2%) <i>SD</i> = 3.0
3	26.5 (80.4%) <i>SD</i> = 4.8 <i>N</i> = 22	27.0 (81.8%) <i>SD</i> = 3.2 <i>N</i> = 24	27.9 (84.5%) <i>SD</i> = 4.6	30.3 (92.0%) <i>SD</i> = 2.4
4	29.9 (90.5%) <i>SD</i> = 2.7 <i>N</i> = 17	28.9 (87.3%) <i>SD</i> = 3.0 <i>N</i> = 17	31.6 (95.7%) <i>SD</i> = 1.1	30.5 (92.5%) <i>SD</i> = 3.0
5	28.2 (85.4%) <i>SD</i> = 4.0 <i>N</i> = 17	30.2 (91.5%) <i>SD</i> = 3.7 <i>N</i> = 21	29.1 (89.4%) <i>SD</i> = 3.7	31.9 (96.7%) <i>SD</i> = 1.3
6	29.4 (89.1%) <i>SD</i> = 3.2 <i>N</i> = 18	30.4 (92.0%) <i>SD</i> = 2.3 <i>N</i> = 17	30.9 (93.7%) <i>SD</i> = 2.0	32.1 (97.2%) <i>SD</i> = 0.7
All	26.7 (80.9%) <i>SD</i> = 4.6 <i>N</i> = 114	27.0 (81.9%) <i>SD</i> = 4.4 <i>N</i> = 117	27.9 (84.5%) <i>SD</i> = 4.8	29.6 (89.6%) <i>SD</i> = 3.7

Note. Total possible score is 33; Total *N* = 231.

Results from the Parent Questionnaire

Of the 126 parents who completed the Parent Questionnaire, only 27 (21.4%) had attended the parent evening that described the *Who Do You Tell* program. The majority of the parents (82 or 65%) noted that they felt good about the program, although 48 (38%) liked the idea but were somewhat worried about their child's reaction. Four parents (3.2%) noted that they had strong reservations but allowed their child to participate. Fewer than half of the parents (58 or 46%) had talked to their child about the possibility of sexual abuse by a familiar person (68 or 54%), while somewhat more had discussed the possibility of sexual abuse by a stranger (72 or 57%). Most parents had talked with their children about not going with strangers (123 or 97.6%), or not going with other grown-ups without parental permission (113 or 89.7%). Ten parents (4.2%) had provided their children materials about sexual abuse in the form of books or videos.

When asked about any changes that they had noted in their child's behavior after the *Who Do You Tell* program (see Table 6), few mentioned any, with the exception that from a quarter to half of the children talked to their parents either about the program or about being careful with strangers. Extreme negative reactions such as nightmares or crying more easily were rare with only four children becoming worried and one child saying no more often to parental requests. Eleven children brought up sexual topics, but it is unclear whether these were requests for information, a positive reaction, or sexual innuendo or discomfort, a negative reaction. A small proportion of parents noted identifiable positive reactions to the program such as increased confidence or standing up to bullies.

Table 6. Parent's Observations of Their Children's Reaction to Who Do You Tell Program

Children's Changed Behaviours Since Participating in the Who Do You Tell Program (<i>N</i> = 126)	Noted	Not Noted
Looks Nervous About Getting Hugs and Kisses From Family Members	0	126 (100%)
Constantly Seeks Attention	0	126 (100%)
Says "No" More Often to Parental Requests	1 (0.8%)	125 (99.2%)
Wets the Bed	0	125 (100%)
Cries Easily	0	126 (100%)
Has Nightmares	0	126 (100%)
Seems Worried About Something Scary Happening	4 (1.7%)	122 (96.8%)
Brings Up Sexual Topics in Conversation	11 (8.7%)	115 (91.3%)
Has Stood Up to Children Trying to Bully Him/Her	5 (4%)	121 (96%)
Seems More Confident	15 (6.3%)	111 (88.1%)
Talks to You About Being Careful With Strangers	32 (25.4%)	94 (74.6%)
Has Talked to You About the Program	67 (53.2%)	59 (46.8%)

DISCUSSION

Similar to other previous research on elementary school-aged children, very few of the participants in the *Who Do You Tell* program had received any prior information about sexual abuse. Only 39 (17%) of the children noted previous exposure to prevention materials about sexual abuse, supporting the continued provision of the *Who Do You Tell* program from the perspective that children are still not typically receiving such information at home. The proportion of one-fifth of the parents who completed the parent questionnaire also attending the parent preview is consistent with several other studies (Duerr Berrick, 1988; Tutty, 1993) where one-quarter to one-third of parents took the opportunity to attend previews. Given that the parents who responded to the parent questionnaire can be considered more motivated with respect to educating their children about sexual abuse prevention, the low proportion from even this highly motivated group speaks to the continuing difficulty of involving parents in sexual abuse prevention programs. Since repetition of the concepts is vital to the material, parents are a logical target to reinforce these ideas yet school-based programs have continually noted problems attracting parent participation.

As in most similar research (Nibert, Cooper, & Ford, 1989; Tutty, 1990b, 1996; Wurtele & Miller-Perrin, 1987), parents reported very few negative effects in their children's reaction to the *Who Do You Tell* program. Extreme negative reactions such as nightmares or crying more easily were not in evidence, with only four children becoming worried and one child saying no more often to parental requests. In the current study, no child was seen as reacting with anxiety about parental hugs and kisses, a commonly noted concern of parents with respect to sexual abuse prevention programs. Importantly, over half of the children talked with their parents about the program, opening up the topic for future discussion. Similarly a number of children brought up questions of sexuality, a positive reaction if parents feel comfortable discussing this normally sensitive topic. The possibility that children may ask questions about normal sexuality is one about which parents should be informed, framing it as a natural reaction.

The statistical results with respect to the children's knowledge of abuse prevention concepts support the claim that children who participated in the *Who Do You Tell* program had significantly higher levels of knowledge of both Inappropriate and Appropriate Touch than children in the wait-list control condition. As with past research, the younger children in the current study knew consistently fewer prevention concepts both at pretest and posttest regardless of research condition. The consistency by which age differentiates knowledge level supports the contention that developmental differences are tied to the ability to learn prevention concepts. These findings are similar to other previously mentioned well-designed research on prevention programs aimed at elementary school-aged children.

The gender of the child made no overall difference in response to the program. This result fits with most of the previous research that has evaluated the effects of gender (i.e., Briggs & Hawkins, 1994; Dhooper & Schneider, 1995; Peraino, 1990; Tutty, 1992), although two studies by Hazzard and colleagues (1990, 1991) reported that girls learned and maintained more of the material.

Similar to the vast majority of well-designed research on child-directed prevention programs, although the increases in knowledge of prevention concepts are statistically significant, in practical terms the gains for children in the treatment condition above that of children in the control group are rather small, on average one or two concepts. The issue of clinical versus statistical significance is one which extends beyond child abuse prevention research into treatment outcome studies in general (Briere, 1996) where it is not uncommon to find statistically significant differences between treatment and control groups of similarly small magnitudes. These relatively small differences may be put in context when one considers the power of the intervention (Lipsey, 1990). The *Who Do You Tell* program utilizes a small group presentation format that consists of two 45 minute to 1 hour sessions for each classroom, in total 1 and 1/2 to 2 hours. Given that it is a relatively short intervention aimed at groups of from 20 to 30 children, one should not necessarily expect a major

impact on every child in the group. Since statistical analysis is concerned with average increases in scores, when looking at a large group of children, the average increases can be expected to be rather small.

In contrast to Blumberg and colleagues' 1991 study, the children in the current study had little difficulty understanding appropriate touch before being in the prevention programs, and the program did not negatively affect these beliefs but improved knowledge levels. Despite this positive finding, programmers must remain sensitive to the possibility that children may overreact to cautions about inappropriate touch, generalizing these to perfectly appropriate situations with others.

A useful question at this point is how to enhance the learning of children given the consistent difficulties that young children experience in acquiring more than one or two prevention concepts after each exposure to the prevention materials. Comparing different programs is a necessary next step. This is more possible with the development of several standardized scales to measure knowledge of prevention concepts. For example, a recently published study by Oldfield, Hays, and Megel (1996) also utilized the CKAQ-R, thus allowing for a comparison of that program and *Who Do You Tell*. Project Trust is comprised of the play *Touch*, one of the earliest and best known sexual abuse prevention developed originally by Illusion Theatre (Anderson, Morris, & Robins, 1990). Oldfield and colleagues (1996) used a posttest-only experimental design with 1,269 elementary school-aged children (658 in the experimental and 611 in the control group), with similar numbers of children in each grade level. The children in the Project Trust program obtained a total CKAQ-R revised score of 26.7 (80.9%, $sd = 4.9$) as compared to 24.1 (73.0%, $sd = 5.3$) for the control condition. This difference is statistically significant at a probability level of .001, a finding very similar to that in the current study. The current study's average pretest total CKAQ-R scores for the experimental and control conditions together is 26.8 ($sd = 4.5$), slightly higher than Oldfield and colleagues' control group condition. The current study's posttest experimental condition CKAQ-R total score is 29.6 ($sd = 3.7$), but this would be expected to be somewhat higher than that obtained in the Oldfield and colleagues' study because of the sensitizing effect of the pretest. Also consistent with the current findings, the age of the child was significant such that older children know more of the concepts than younger children across conditions. In summary, the results of the two studies, although evaluating different program formats, were consistent.

CONCLUSIONS

The results of the evaluation support the *Who Do You Tell* program as fulfilling its mandate to teach elementary school-aged children core abuse prevention concepts and to provide strategies to disclose should they be abused. The research is limited by not including a follow-up component. The findings parallel that of other well-designed research that has reported similar statistical significance but still identified that the knowledge gains are small overall and negligible for some children. This criticism must be addressed to establish the credibility of child-directed prevention programs.

It is time to acknowledge that sexual abuse prevention programs are not the "quick fix" that many had hoped for. This, however, does not mean that the programs are not effective. The relatively small gains suggest that these interventions need to be offered in a more powerful manner. With the exception of those regions where sexual abuse prevention materials have been incorporated into the school curriculum, presumably providing more exposure to the concepts, programs are offered by outside consultants. In order to gain entry into school systems that many times only reluctantly support them, most programs remain relatively short (1 to 2 hours of presentation/practice). The current study can support program personnel in arguing that children need additional exposure to the materials by mechanisms such as making presentations longer, and adding other

components such as plays, videos, coloring books, role-playing situations, and games. Supplementary material for teachers to present after the consultants have left can be used to advantage if, indeed, teachers take the time to and feel comfortable utilizing them. Although numerous strategies to involve parents in the programs have consistently been responded to by only a small proportion, we need to continue to propose and evaluate other solutions, such as inviting the parents to attend school presentations along-side their children.

Child-directed programs are only one of a range of prevention audiences which are ideally addressed in combination (Tutty, 1991). Prevention concepts are difficult for children to integrate because many reflect culturally endorsed beliefs about relationships with others, especially between children and adults. Rather than simply questioning whether the programs work, it would be more productive to investigate how much more exposure to the ideas children of different developmental stages need before they incorporate the material into their belief systems. Research should also examine whether some children may respond better to different styles of presentation, and investigating whether children who do not learn the prevention concepts can be identified by demographic or interactional characteristics.

It is ironic that, despite the fact that sexual abuse prevention programs have come under more research scrutiny than many treatment modalities, for example therapy for child victims, considerable scepticism about their utility remains. Hopefully the discussion and results of this paper will not only provide support for well-designed programs but also suggest future research directions.

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RÉSUMÉ

Objectif : Cette recherche a évalué un programme de prévention des agressions sexuelles ciblant les enfants du cours primaire. Bien que d'autres évaluations du même genre ont démontré des améliorations importantes au niveau des connaissances et des habiletés, il en demeure pas moins que plusieurs questions sont toujours sans réponse.

Méthode: On a affecté 231 enfants de façon aléatoire au programme de prévention ($n = 117$) ou bien on les a placé sur une liste d'attente ($n = 114$), après quoi leurs connaissances des notions de prévention ont été mesurées à partir d'un questionnaire sur les connaissances de l'agression (révisé CKAQ-R), lequel est normalisé et possède de solides qualités psychométriques (Tutty, 1995). On y a ajouté une nouvelle échelle sur les touchers appropriés.

Résultats: Une analyse des covariances démontrent que les enfants faisant partie du programme de prévention ont acquis de nouvelles connaissances sur ce qui constitue un toucher approprié ($p = .000$) et non approprié ($p = .012$) comparé aux enfants du groupe contrôle. L'âge s'avère un facteur important. Les plus jeunes connaissent moins de notions sur les touchers inappropriés tant avant qu'après avoir participé au programme ($p = .04$). De même en est-il pour les touchers appropriés ($p = .04$).

Conclusions: Les résultats sont conformes aux autres évaluations des programmes de prévention des abus sexuels, toutefois, le fait que les connaissances acquises sont légèrement supérieures porte à croire que le programme devrait être renforcé.

RESUMEN

Objetivo: En esta investigación se evaluó un programa de prevención del abuso sexual dirigido a niños en primer nivel de edad escolar. A pesar de que otras evaluaciones de programas similares han demostrado mejoras significativas en el conocimiento y en las habilidades implicadas en estos programas, todavía permanecen sin resolver algunas cuestiones claves con respecto a su eficacia.

Método: Controlando la distribución por edad, 231 niños y niñas fueron asignados de manera aleatoria a alguno de dos grupos: (1) un grupo compuesto por 117 niños/as que participaron en el programa y un grupo control constituido por 114 niños/as en lista de espera.

Resultados: A través de un análisis de covarianza, se mostró que los niños/as que recibieron el programa mejoraron, significativamente y en mayor grado que los niños/as del grupo control, sus niveles de conocimiento tanto en relación con la variable "Contacto Inapropiado" ($p = .000$), como con la variable "Contacto Apropiado" ($p = .012$). La edad diferenció significativamente los niveles de conocimiento en relación con la variable "Contacto Inapropiado", de forma que los niños más jóvenes conocían menos conceptos tanto en el pretest como en el posttest ($p = .000$). Se obtuvieron resultados paralelos en relación con la subescala "Contacto Apropiado" ($p = .04$).

Conclusiones: Los resultados son consistentes con otras evaluaciones de programas de prevención del abuso sexual infantil. Sin embargo, el hecho de que el tamaño de las mejoras, a pesar de ser significativas estadísticamente, sea reducido, sugiere que los programas necesitan ser presentados de una forma más poderosa.