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THE EFFECTIVENESS OF VICTIMIZATION PREVENTION INSTRUCTION: AN EVALUATION OF CHILDREN'S RESPONSES TO ACTUAL THREATS AND ASSAULTS

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Abstract—This study examined whether instruction in school and at home about how to prevent victimization has any impact on children's behavior in situations of real victimization threat. Telephone interviews were conducted in 1992 with a nationally representative sample of 2,000 youths age 10 to 16 and their caretakers. More comprehensive school programs had mixed, small but overall positive effects. Children exposed to such school-based prevention programs performed better on a short test of knowledge about sexual victimization; when victimized or threatened were more likely to use the self-protection strategies recommended by prevention educators; were more likely to feel that they had been successful in protecting themselves; and were more likely to disclose to someone about the victimization attempts. They were not better able to limit the seriousness of the assaults and, in fact, they experienced more injuries in the course of sexual assaults. Comprehensive parental instruction also had positive effects on knowledge, the use of preferred self-protection strategies and the likelihood of disclosure. Children with comprehensive parental instruction were more likely to limit the seriousness of assaults.

Key Words—Victimization prevention, Abuse prevention, Threats and assaults, Evaluation.

INTRODUCTION

PROGRAMS THAT INSTRUCT children and their parents on how to avoid and report sexual abuse and other victimizations have proliferated throughout the country and gained widespread acceptance (Kohl, 1993; Wurtele & Miller-Perrin, 1992). A 1990 survey of 440 randomly selected elementary school districts throughout the country found that 85% offered such instruction; in 64% such instruction was mandated (Breen, Daro, & Romano, 1991).

In light of the broad implementation of such instruction, calls have increased for evaluation of its effectiveness. Questions have been raised about whether children actually learn or retain any of the information and, perhaps most basically, whether children are truly capable of changing the outcome of victimizing encounters, especially with motivated older offenders (Berrick & Gilbert, 1991; Krivacska, 1990; Melton, 1992; Reppucci & Haugaard, 1989).

A variety of programs have been evaluated with some of these concerns in mind (Finkelhor & Strapko, 1992). The evaluations show that children do learn many of the concepts being taught, older children somewhat more so than younger, early elementary and preschool-aged children. However, some of the concepts, such as accepting the idea that abuse can occur at the hands of someone known or related, are sometimes hard to retain.

Unfortunately, in part due to ethical and methodological problems, little research has looked

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at the real-world effectiveness of instruction. One study did use a simulation in which a confederate, posing as a stranger, tried to get children to go with him and found evidence of program effectiveness (Fryer, Kraizer, & Miyoshi, 1987). There is also evidence that, whatever happens in the future, the instruction prompts some children to disclose past abuse who probably would not have done so otherwise (Kolko, Moser, & Hughes, 1989).

The present study, the National Youth Victimization Prevention Study, used a nonexperimental design to look at the impact that prevention instruction had on the specific strategies children were using in real encounters to avoid and cope with attempted victimizations.

METHODS

Study Design

The study staff interviewed by telephone a nationally representative sample of 2,000 young people between the ages of 10 and 16 and their caretakers during the months of May 1992 through February 1993. A sample of households was selected using a multistage area probability/random digit dialing procedure and screened for the presence of appropriate age children. This technique is specifically designed to ensure that a sample is nationally representative, based on both geographic stratification and important demographic characteristics such as gender and racial/ethnic identification. Interviewers spoke with the primary caretaker in each household, asking him or her some questions relevant to child victimization prevention and explaining the objectives of the study. They then obtained parental permission to interview the child. Speaking to the children, interviewers again explained the study, obtained consent and made sure that the child was alone and free to talk openly. They then proceeded with an interview that lasted between 30 minutes and an hour. The interviewers, employees of an experienced social science research firm, had extensive training and background in conducting interviews with children. To further protect confidentiality, most questions were designed to elicit simple "yes/no" responses that would not reveal any of the question content to any household member who happened to overhear. All children were offered the number of a national child protection telephone hotline at the end of the interview. In addition, children who were judged to be in possible current jeopardy from child abuse ($n = 9$ in the present sample) were recontacted by a psychologist trained in telephone counseling (described to the child as a person from the study who needed to ask them a few additional questions), who, after assessing the problem in greater detail, arranged for referrals to local authorities when necessary.

The participation rate was 88% of the adults approached, and 82% of the eligible children in the households of cooperating adults, despite the fact that the study involved children, a sensitive topic, a lengthy interview and required the consent of two individuals. About four-fifths of the child nonparticipation came from caretakers denying permission to interview the children, and the rest from children not wishing to be interviewed. The youngest (10) and oldest (16) age children had marginally lower levels of participation. An analysis of the households with child nonparticipants showed them to be demographically indistinguishable from the participants, although there was a slightly greater salience for issues of violence (more concern, more perception of threat) among the parents of participants.

Although telephone interviewing sometimes elicits skepticism from those trained in in-person history-taking, it is a well-established epidemiological method (Finkelhor & Strapko, 1992), and is now even used by the Bureau of the Census for conducting the National Crime Survey (Fryer et al., 1987). It is a cost-effective methodology (Weeks, Kulka, Lessler, & Whitmore, 1983) that allows access to 94% of U.S. households (Groves, Biemer, Lyberg,

Massey, Nicholls, & Waksberg, 1988). Comparative studies have shown telephone interviews to be as effective as in-person interviews for eliciting reliable and valid information even about such sensitive topics as drug usage and sexual behavior (Bajos, Spira, Ducot, & Messiah, 1992; Bermack, 1989; Czaja, 1987; Marin & Marin, 1989).

Sample

The final sample of 1,042 boys and 958 girls was generally well-matched to U.S. Census statistics for the population of this age: about 10% black, 7% Hispanic, 3% other races including Asian and Native American. Fourteen percent came from families with incomes of under \$20,000. Fifteen percent were living with a single parent, another 13% with a parent and stepparent and 3% with some nonparental caretaker.

Instrumentation

School-based program exposure and content. A question asked: "Lots of schools these days teach kids about how to avoid becoming a victim of different kinds of crime, including sexual abuse. Does your school ever do this?" If the answer was yes, additional information was sought about the grade(s) in which the child participated and the content of the best remembered program. Children were asked closed-ended questions about whether that program included each the following 12 components generally recommended by prevention educators: content about sexual abuse, bullies, good and bad touch, confusing touch, incest, screaming and yelling to attract attention, telling an adult, abuse is never the child's fault, a chance to practice in class, information to take home, a meeting for parents, and repetition of the material over more than a single day. We divided programs into the categories *more comprehensive* and *less comprehensive* according to whether they contained at least nine of those components. Nine out of 12 was the criterion chosen because it implied a large number of the suggested components, while also not yielding too small a group of children in the important index group. Nonetheless, children's recollections of program content introduce a certain level of imprecision into our classification of prevention programs into more and less comprehensive groups.

Parental instruction. A question asked: "Have your parents ever talked to you about what you should do to avoid becoming a victim of sexual abuse?" Additional information was sought about the content of this instruction. Specifically, children were asked whether parents discussed each of the following: abusers can be relatives or family members, screaming and yelling to attract attention, telling an adult, and abuse is never the child's fault. We used a criterion similar to the one for school-based instruction, affirmative responses to 75% (three of four) of the parent content items, to group children into a more comprehensive parental instruction category. Insofar as the parent content items refer only to information about sexual abuse, our measure of parental prevention instruction is more limited in scope than our measure of school-based victimization prevention instruction.

Knowledge about sexual abuse. Because many of the programs focus on it particularly, children were administered a 13-item test of knowledge about sexual abuse. Sample items included: "Sexual abuse only happens to girls," "Most people who sexually abuse kids are strangers." A scale (with a range of 0-16) was created from correct scores to these questions plus the answer to the question, "How well do you understand what is meant by the term *sexual abuse* or *child molestation*?" (very well = 3; somewhat well = 2; not too well = 1).

Victimizations. Children were asked about their lifetime experience with a wide range of actual or attempted victimizations, including assaults and attempted assaults by peers, gangs or family members, kidnappings by persons in cars and sexual victimizations. Based on research showing that disclosure is aided by multiple and specific screening questions, the study asked 12 separate questions about possible victimizations. Two examples are: "Sometimes kids get pushed around, hit or beaten up by members of their own family, like an older brother, or sister or parent? Has anyone in your family ever pushed you around, hit you or tried to beat you up?" "Has there ever been a time when an older person tried to feel you, grab you or kiss you in a sexual way that made you feel afraid or bad?"

A child saying yes to any screener was asked when the most recent episode occurred. The dating of those episodes was reverified in a subsequent portion of the interview where children were asked a set of detailed questions about up to two of their most recent victimization experiences. Those questions also covered facts about the perpetrator, what the perpetrator did, what the child did to protect him/herself, injuries that occurred and disclosures that the child made. We used the information obtained in this portion of the interview to categorize episodes into the following types of attempted and completed victimizations: nonfamily assault, family assault, sexual assault, genital violence, and kidnapping.

Fifty-one percent of the children experienced an attempted or completed victimization at some time. More specifically, 33% had experienced an attempted or completed physical assault by a nonfamily member, 13% by a family member, 6% an attempted or completed kidnapping and 11% an attempted or completed sexual victimization. (Percentages do not sum due to some children experiencing multiple types; see Finkelhor & Dziuba-Leatherman [1994] for specific definitions of victimization types and additional detail on rates). Attempted sexual victimization included attempts to touch or kiss the child as well as threats and unwanted overtures by older persons and/or peers.

Attempted (which included affirmative responses to one of the 12 screeners) and completed episodes were combined for these analyses because prevention instruction is intended to apply to both. For children with more than one victimization, the information used in the current analysis pertains to the more recent episode. To ensure proper causal order, victimizations were only included for children in the instruction group if they occurred after the instruction. Thus the number of children with victimizations included in this analysis is less than the number of all victimized children.

Self-protection strategies. The children who reported a victimization or attempted victimization were asked about a series of possible actions the child might have taken to try to protect him/herself, including doing what the attacker wanted, fighting back and running away. A scale of "preferred strategies" was created on the basis of the four actions recommended by prevention education programs—insisting to be left alone, yelling/screaming, threatening to tell, and actually telling—assigning one point for each strategy the child reported using, plus an additional point if the person they told was an adult.

Self-perceived efficacy. Prevention educators argue that teaching children active resistance and avoidance strategies will help them feel empowered in the face of threats and victimizations. However, others worry that this education gives children unrealistic expectations that set them up for guilt or disillusionment. In the absence of any previously established measure, we devised a measure of whether children felt a sense of efficacy in coping with their confrontations by asking them if they thought any of the things they did: 1. Helped to protect them; or 2. kept things from getting worse; or 3. kept them from getting injured. A scale was created (Cronbach's Alpha = .75) consisting of one point for a positive judgment on each item.

Table 1. Outcomes Related to School-Based Prevention Program Exposure

	All Victimizations				Sexual Victimizations			
	No Program (n = 296)	Less Comprehensive (n = 237)	More Comprehensive (n = 236)	p ^a	No Program (n = 65)	Less Comprehensive (n = 30)	More Comprehensive (n = 48)	p ^a
Knowledge Score (M) ^b	12.81	12.75	13.35	<.001	—	—	—	—
Number of Preferred Strategies Used (M)	2.23	2.24	2.44	.03	1.91	1.70	2.27	.04
Other Strategies Used								
Fight Back (%)	65%	67%	65%	.41	44%	47%	63%	.025
Cry (%)	16%	16%	17%	.39	9%	3%	23%	<.001
Perceived Protective Efficacy (M)	1.87	1.95	2.15	<.001	1.60	1.83	1.94	.12
Completed as % of All Attempted and Completed Incidents								
Injury (%)	61%	66%	62%	.39	31%	47%	46%	.13
Disclosures (%)	26%	23%	26%	.41	8%	3%	15%	.06
	64%	61%	71%	.01	57%	40%	71%	.015

^a Contrast comparing more comprehensive school programs and all others (i.e., less comprehensive programs and no programs). All *p* values are one-tailed.

^b Knowledge questions were asked of all 2,000 children in the survey regardless of whether they reported a victimization incident. The total *N* for the knowledge analysis was 1,961 (No Program *n* = 597; Less Comprehensive *n* = 704; More Comprehensive *n* = 660; 39 cases with missing data).

To prevent recollections about prevention training from influencing children's accounts, information about all victimization experiences, as well as the knowledge test, were elicited prior to asking about parent or school-based prevention instruction and its content.

Statistical Analysis

All children who answered the knowledge test (1,961) were included in the analysis of program effects on knowledge. Only children reporting an attempted or completed victimization (783) were included in the other analyses because only they answered questions about self-protection strategies, efficacy, injury and disclosure. Analyses were performed for all types of victimizations together and for sexual victimizations alone. Sexual victimizations were analyzed separately because so much prevention instruction focuses on this topic; other types of victimization were not broken out separately because of small sample sizes. Careful attention was paid to sequencing to insure that program effects pertained only to programs that occurred *prior to* victimization episodes.

Program effects on knowledge, self-protection strategies, and self-perceived efficacy were analyzed using analysis of variance and multiple regression. Program effects on disclosure were analyzed using chi-square and logistic regression tests. Early examination of the data suggested that the children in the low comprehensive school program group were indistinguishable from the children with no program exposure, so they were grouped together for many of the primary statistical comparisons. Variables used as controls, where appropriate, included gender, age, race, family structure, a social class measure, community violence level (a standardized composite of parents' and children's ratings of perceived violence with higher scores representing more violence), the child's weight (an indicator of how easily the child could be overpowered), and whether the child had received a failing grade in school (a measure of academic aptitude).

Table 2. Multiple Linear Regression Model Predicting Children's Sexual Abuse Knowledge Scores

	Estimated Standardized Regression Coefficient	95% Confidence Interval	<i>p</i>
More Comprehensive Program	.05	.003, .10	.025*
Child Age (10-11)	-.40	-.45, -.35	<.0001
Program X Age Interaction	.05	.01, .10	.02
Child Gender (female)	.13	.09, .17	<.0001
Child Race (white)	.05	.01, .09	.01
Failing Grade	-.09	-.13, -.05	<.0001
Education, H of Hh	.06	.02, .10	.002
Community Violence	-.06	-.10, -.02	.002
<i>F</i> (8, 1881) = 56.22, <i>p</i> < .001			
<i>R</i> ² = 19.0%			

Note. Referent categories for dichotomous variables are indicated in parentheses.

* All *p* values are one-tailed.

RESULTS

Exposure to School-Based Prevention Education

Overall, 67% of children in this national sample reported having received a school-based abuse or victimization prevention program at some time, 37% within the last year. The proportion of children receiving *more comprehensive* instruction, according to our criteria, were 34% at some time and 17% in the last year.

In addition to school programs, a small number of the children (4%) reported having received a prevention education program elsewhere, the main site being churches. However, most of these children had received school programs as well. Nonschool programs were the sole program for only 1% of the children.

Impact of Exposure

In regard to knowledge about abuse, children who had been exposed to more comprehensive prevention programs did score better on the test than children who had a less comprehensive program or no program at all (Table 1). There was no reliable difference in knowledge scores between children in the latter two groups. The knowledge increase due to more comprehensive program exposure was, overall, small and suggestive of a ceiling effect, but was most marked for the youngest children in our sample (10-11 years old). The advantage from the more comprehensive programs and the interaction with age remained significant even when a variety of factors that may affect sexual abuse knowledge were used in the analysis as covariates (i.e., children's gender, race, school performance, their parent's education, and the level of violence in their community) (Table 2).

In regard to actual behaviors, children who had had a more comprehensive prevention program were also somewhat more likely, when threatened with victimization, to report using the four "preferred self-protection strategies" discussed previously: demanding to be left alone, yelling, threatening to tell or actually telling. Controlling for other factors likely to influence victimization responses, the increased use of self-protection strategies remained, both for all victimizations and for sexual abuse episodes alone (Table 3). Exposure to less comprehensive school prevention programs had no impact on the use of preferred strategies.

Among other possible responses to victimization threats, including ones not necessarily recommended by prevention instructors, only two showed significant or near-significant differ-

Table 3. Multiple Linear Regression Model Predicting Children's Use of Preferred Protective Strategies

	All Victimizations (n = 783)				Sexual Victimizations (n = 148)			
	Estimated Standardized Regression Coefficient	95% Confidence Interval		p	Estimated Standardized Regression Coefficient	95% Confidence Interval		p
More Comprehensive Program	.08	-.01	.15	.02*	.15	-.007	.31	.05
Child Age	-.22	-.31	-.13	<.0001	-.08	-.26	.10	.19
Child Gender (female)	.26	.19	.33	<.0001	.18	-.004	.36	.015
Child Race (white)	.03	-.04	.10	.23	.04	-.14	.22	.32
Child Weight	.04	-.05	.13	.19	.05	-.13	.23	.28
Failing Grade	-.01	-.08	.06	.36	-.13	-.31	.05	.09
Education, H of Hh	-.04	-.11	.03	.17	-.09	-.27	.09	.16
Perpetrator Age	-.15	-.23	-.07	<.0001	-.19	-.35	-.03	.01
Afraid of Dying During Episode	-.21	-.28	-.14	<.0001	-.30	-.46	-.14	<.0001
	$F(9, 681) = 12.86, p < .001$ $R^2 = 15.0\%$				$F(9, 119) = 3.15, p = .002$ $R^2 = 19.3\%$			

Note. Referent categories for dichotomous variables are indicated in parentheses.

* All *p* values are one-tailed.

ences according to program exposure. Children with more comprehensive programs, when threatened with sexual victimization, were more likely to fight back and more likely to cry.

Overall, only children who had received more comprehensive prevention programs also reported that they felt more efficacious in dealing with all victimizations; that is, that what they had done had helped protect them, kept them from getting injured, or kept it from being worse. They also felt they were more efficacious in dealing with sexual victimizations, but the difference in this case was not statistically significant. Moreover, the sense of success in general victimizations related to program exposure was not explained by any differences in gender, age, race, the size of the child, the social class of the family, or characteristics of the victimization like the age of the perpetrator or the danger the child felt he or she was in (Table 4).

Table 4. Multiple Linear Regression Model Predicting Children's Perceived Protective Efficacy

	All Victimizations (n = 783)				Sexual Victimizations (n = 148)			
	Estimated Standardized Regression Coefficient	95% Confidence Interval		p	Estimated Standardized Regression Coefficient	95% Confidence Interval		p
More Comprehensive Program	.11	.03	.19	.003*	.08	-.10	.26	.18
Child Age	.01	-.09	.11	.41	-.08	-.28	.12	.22
Child Gender (female)	-.02	-.10	.06	.29	.22	.04	.42	.01
Child Race (white)	-.10	-.18	-.02	.005	-.16	-.34	.02	.04
Child Weight	.02	-.08	.12	.37	.05	-.15	.25	.30
Failing Grade	.02	-.06	.10	.30	.02	-.18	.22	.42
Education, H of Hh	-.02	-.10	.06	.29	-.10	-.30	.10	.15
Perpetrator Age	-.07	-.15	.01	.04	-.08	-.26	.10	.18
Afraid of Dying During Episode	-.01	-.09	.07	.40	-.04	-.25	.14	.31
	$F(9, 681) = 2.20, p = .02$ $R^2 = 3.0\%$				$F(9, 119) = 1.64, p = .11$ $R^2 = 11.0\%$			

Note. Referent categories for dichotomous variables are indicated in parentheses.

* All *p* values are one-tailed.

In spite of their sense of efficacy, however, there were not any signs that the children with more comprehensive training managed to limit the likelihood that a threat would turn into a completed assault. For example, they did not have lower levels of completed victimizations as a percentage of all attempted and completed incidents (i.e., a measure of whether children succeeded in thwarting attempts and threats before they became full-fledged assaults). In fact, they reported more injuries than the other children in sexual victimization attempts.

In regard to disclosures, children who had had the more comprehensive prevention programs did disclose victimizations more often. After adjusting for factors potentially related to parental disclosure, such as gender, age, race, family structure, and whether in general they shared confidences with their parents, children with more comprehensive programs were still more likely to tell someone (Table 5). There was a higher level of disclosures for the sexual victimizations alone, as well. Children who were exposed to less comprehensive school programs were somewhat less likely than children with no program exposure to disclose their victimization experiences, although this difference was not statistically reliable.

Prevention Information from Parents

In addition to information they received in school, children also received victimization prevention instruction from their parents. Fifty-seven percent of the children said their parents had specifically talked to them about how to avoid sexual abuse and, based on information the parents had or had not given, 36% of the children were classified as having gotten more comprehensive prevention education from their parents.

Comprehensive prevention training from parents also had important effects (Table 6). Children with more comprehensive instruction from parents had substantially higher knowledge scores than other children. They made significantly more use of the preferred self-protection strategies in all victimizations and sexual victimizations specifically. They appeared able to limit attempts and threats from becoming completed assaults in the case of victimizations generally, although not specifically for sexual assaults. Further, they were more likely to disclose victimizations generally and sexual victimizations in particular.

When instruction from parents was entered into multivariate analyses together with school-based instruction, the influence of school-based programs declined, sometimes to nonsignificance, as in the case of the likelihood of making disclosures. A probable reason for this is that much of the parental instruction was prompted by the child participating in a school-based prevention program. Fifty-four percent of the children with a school program said they had

Table 5. Multiple Logistic Regression Model Predicting Children's Disclosure of Victimization

	All Victimizations (<i>n</i> = 783)			Sexual Victimizations (<i>n</i> = 148)		
	Odds Ratio	95% Confidence Interval	<i>p</i>	Odds Ratio	95% Confidence Interval	<i>p</i>
More Comprehensive Program	1.52	1.06, 2.19	.01*	2.09	0.92, 4.72	.04
Child Age	0.96	0.88, 1.05	.21	1.06	0.85, 1.33	.29
Child Gender (female)	1.37	0.97, 1.91	.04	1.19	0.52, 2.73	.34
Child Race (white)	1.52	1.03, 2.23	.02	1.95	0.79, 4.79	.07
Intact Family	1.00	0.71, 1.40	.50	0.53	0.24, 1.17	.06
Confides in Parent	1.26	1.09, 1.46	.001	1.14	0.81, 1.61	.23
Education, H of Hh	1.03	0.92, 1.16	.28	1.45	1.08, 1.94	.007
	$\chi^2 (7) = 26.78, p < .001$			$\chi^2 (7) = 17.03, p = .02$		

Note. Referent categories for dichotomous variables are indicated in parentheses.

* All *p* values are one-tailed.

Table 6. Outcomes Related to More Comprehensive Parental Instruction

	All Victimizations			Sexual Victimizations		
	Less Comprehensive or None (n = 518)	More Comprehensive (n = 265)	p	Less Comprehensive or None (n = 92)	More Comprehensive (n = 56)	p
Knowledge Score (M) ^a	12.70	13.43	<.001 ^b	—	—	—
Number of Preferred Strategies Used (M)	2.14	2.62	<.001	1.78	2.41	.004
Perceived Protective Efficacy (M)	1.93	2.06	.08	1.73	1.84	.30
Completed as % of All Attempted and Completed Incidents	66%	58%	.02	42%	39%	.31
Disclosures (%)	61%	74%	<.001	50%	73%	.004

^a Knowledge questions were asked of all children in the survey regardless of whether they reported a victimization incident. The total *N* for the knowledge analysis was 1,998 (Less Comprehensive or None *n* = 1288; More Comprehensive *n* = 710; 2 cases with missing data).

^b All *p* values are one-tailed.

discussed it with their parents and comprehensive school-program exposure was correlated $r = .28$ with comprehensive parental instruction. However, this should not be taken to indicate that the overlap between comprehensive school and parental instruction was so large as to prevent an assessment of the independent effects of each type of training. Seventeen percent of the children in our analyses received comprehensive prevention instruction exclusively from parents and 14% received such instruction only from a school program.

DISCUSSION

Children in this study who had received comprehensive prevention instruction reported behavioral differences in real-life situations that were consistent with the objectives of that instruction. Both the more comprehensive school-based prevention education programs and more comprehensive parental instruction were associated with a number of positive outcomes in actual practice:

1. Children who received more comprehensive school-based victimization prevention education programs had somewhat greater knowledge about sexual victimization than other children.
2. Victimized and threatened children who had received more comprehensive prevention programs were somewhat more likely to use recommended self-protection measures.
3. Victimized and threatened children with more comprehensive programs perceived themselves as having been more effective in keeping themselves safe and minimizing their harm.
4. Victimized and threatened children who had been exposed to more comprehensive prevention programs were more likely to disclose the episode to someone.
5. More comprehensive *parental* instruction was also associated with increased knowledge levels, the use of preferred self-protection strategies and the likelihood of disclosing victimizations.

However, some of the effects of school-based program exposure were small or of marginal statistical significance, and generally mediated by parental instruction. Although the differences

were apparent for children encountering sexual assaults, as well as general victimizations, in the former the differences were generally weaker, given many fewer cases. Thus, prevention educators and researchers should be careful not to overemphasize the *practical significance* of the school-based prevention instruction findings reported here.

Moreover, the study did not find that school programs helped children to actually thwart threats from becoming completed victimizations, which would have been the most encouraging finding. By contrast, the better parent instruction *did* help children do this, suggesting that instruction perhaps can make a difference, but that the school programs are not as effective in this regard as parents.

Nonetheless, even if school programs did not help children to thwart victimizations, they apparently helped children to *feel* more successful. This could be very important in the light of literature that shows that having a sense of control over events bodes well for recovery from trauma (Janoff-Bulman & Lang-Gunn, 1988). It also allays the concern of some writers who have worried that trained children might, in the wake of victimizations, feel more frustrated than other children because they had been led to expect too much. This apparently is not the case.

Among these encouraging results, there is also one potentially troubling finding from the study. The children with more comprehensive school programs suffered more injuries during sexual victimizations than other children. This is probably related to their greater tendency to fight back during those episodes. The finding is a reminder that more active resistance may have its costs as well as benefits. It is a message to be taken seriously by researchers and program designers.

The findings from this study do go considerably beyond previous research on the impact of victimization prevention training. Other research has shown that many children acquire some knowledge from programs and that they prompt some children to disclose past or ongoing victimizations. 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.

The findings on the positive effects of program exposure have added plausibility in that the effects were noted for the more comprehensive programs only, not just any program exposure. It is also noteworthy that the effects were detected in a sample that had been exposed to a diverse array of programs, not those necessarily administered under experimental conditions. The programs the children in this study received were not preselected for their presumed efficacy or monitored for treatment integrity. The evaluation in this way of other types of diverse prevention programs has often had difficulty in noting any effects (Shaffer, Garland, Vieland, Underwood, & Busner, 1991). The significance of the findings is bolstered by the fact that they come from a large nationally representative sample of children, including children of all ethnicities, backgrounds, and social classes.

However, this study has a number of limitations that must temper the conclusions to be drawn and that need to be offset by other studies in the future. First, causal inferences from this study should be made very cautiously given its cross-sectional, rather than experimental design. It is possible that the children who reported program exposure are different from the other children in ways we could not control for statistically, and that these differences, not the effectiveness of the programs, are responsible for the apparent results.

In addition, our findings rely on the children's own possibly biased or distorted accounts. We have no independent confirmation about whether they actually received a prevention program and its content, whether they were really victimized, or whether they really disclosed. The problem is not that children's recall would be more distorted than that of any other possible respondents, but that correlated recall biases could explain the findings. Some of the children are providing information about both prevention programs and victimization experi-

ences that are several years in the past. Thus, when we speak of the effects of comprehensive school instruction on children's responses to real-life threats, what we are actually describing are associations between children's *reports* of program exposure and their *reports* of how they behaved in victimization situations.

Along similar lines, the outcome measures that we used to assess program effects (e.g., victimization knowledge, preferred protection strategies, protective efficacy) were newly developed for this research and are therefore in need of more rigorous psychometric validation. As the victimization prevention field continues to develop, an important goal for researchers is the development, testing, and refinement of instruments that reliably and validly measure the desired cognitive and behavioral effects of prevention instruction.

It should also be kept in mind that the findings of this study apply only to older children, those aged 10 to 16. They do not necessarily apply to some of the most hotly-debated controversies about victimization prevention education, which concern their effects on young preschoolers and early elementary-age children.

Finally, the limitations of interviewing children about victimization over the telephone have not been well-studied. About 6% of U.S. households, and especially poor and minority ones, lack a phone, so a methodology such as the present one certainly misses certain high-risk groups, not to mention children living outside of households in institutions.

CONCLUSIONS

The findings from this study are consistent with the idea that prevention instruction can help improve children's response to victimizations, and that school-based victimization prevention education programs may be having some success in increasing knowledge, inspiring a sense of efficacy and promoting disclosures by children.

There are also some specific policy recommendations that flow from the findings. First, efforts need to be made to improve the quality of prevention programs targeted at children. The effects we identified were associated with more comprehensive programs, that is programs more likely to include specific content concerning bullies, good and bad touch, and sexual abuse in the family among other topics. The programs we labeled "less comprehensive" may have included such material, but apparently not enough to be remembered by the children we interviewed. These programs need to be upgraded.

Second, prevention education needs to come from parents themselves. Good instruction from parents was particularly effective in increasing knowledge and in promoting disclosures. And parental instruction, more so than school instruction, helped children to actually thwart victimization attempts. There are signs in our study that much of the effectiveness of the school programs came from the parental instruction it may have stimulated. Some messages, like confidence in resisting bullies, may be more effectively communicated from parents. So school-based educators need to do more to involve parents and to encourage parent-child communication about victimization prevention.

Third, additional thinking and research needs to go into the question of how children actually thwart attempted victimizations. This study does provide support for the hypothesis that instruction can change children's response to actual victimizations. Good parental instruction was actually associated with children avoiding completed assaults, evidence against the pessimistic view that instruction cannot make a difference. School-based programs need to look more critically at whether they can produce these effects as well. By interviewing children about, and even observing them while they handle threats and conflicts, we may be able find out from them more accurately what works. We may be able to craft educational programs that give them even more tools to stay out of harm's way.

Finally, prevention educators need to think more about preventing *injury* in addition to preventing victimization. One troubling finding from the study is that the children with more comprehensive school programs experienced more injury in coping with sexual assaults, probably related to their more aggressive resistance. This does recall debates in the rape literature about whether more active resistance in some circumstances entails higher risks. In addition to conducting more research on this issue, prevention educators may want to give thought to including more guidelines to children about how to avoid injury. It is possible that attention to this subject, along with the other prevention skills, could help children to experience the positive effects of prevention training without any higher risk.

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Résumé—Cette étude a voulu déterminer si l'enseignement à l'école et à la maison, dans le but d'empêcher que les enfants deviennent des victimes, affecte le comportement des enfants dans des situations où ils sont réellement menacés. Pour ce faire, on a mené des entrevues téléphoniques auprès de 2,000 enfants américains âgés de 10 à 16 ans, ainsi que des personnes les ayant à leur charge. L'échantillon était représentatif à l'échelle nationale. Les programmes scolaires de prévention les plus larges avaient des effets variés, moins considérables, mais positifs tout de même. Les enfants ayant fait partie de ces programmes à l'école ont démontré une meilleure connaissance de la question des abus sexuels, suite à un bref test. Lorsque victimes eux-mêmes ou menacés de l'être, ils étaient plus aptes à faire appel à des stratégies recommandées par les enseignants, pour se protéger. Ils étaient plus aptes à sentir qu'ils avaient réussi à se protéger. Enfin, ils étaient plus aptes à dévoiler un incident. Toutefois, ils n'étaient pas mieux préparés à contenir la gravité de l'agression, et, en fait, ils ont été plus souvent blessés dans des incidents d'agressions sexuelles. Les instructions données par les parents ont aussi eu des effets positifs au niveau des connaissances, du recours à de bonnes stratégies pour se protéger et de la probabilité de dévoiler des incidents. Les enfants bien préparés par leurs parents étaient plus aptes à contenir la gravité des agressions.

Resumen—Este estudio examina si la instrucción en la escuela y en la casa sobre como prevenir la victimización tiene alguna consecuencia sobre la conducta de los niños en situaciones de amenaza real de victimización. Se realizaron entrevistas telefónicas en 1992 con una muestra representativa de 2,000 jóvenes de 10 a 16 años y con sus cuidadores. La mayoría de los programas escolares tenían programas integrales mezclados, con efectos reducidos pero positivos. Los niños expuestos a estos programas escolares de prevención ejecutaban mejor sobre ciertos conocimientos sobre la victimización sexual; cuando eran victimizados o amenazados tenían más posibilidad de desarrollar estrategias de auto-protección recomendada por los educadores en prevención; tenían más posibilidad de sentirse que habían tenido éxito en protegerse a sí mismos; y tenían más posibilidad de denunciarle a alguien sobre los intentos de victimización. No fueron capaces de limitar la seriedad de los asaltos y, de hecho, sufrieron más heridas en el transcurso de los asaltos sexuales. La instrucción integral parental también tuvo efectos positivos sobre el conocimiento, el uso de estrategias preferidas de auto-protección y la posibilidad de denuncia. Los niños con instrucción parental integral tenían mayores posibilidades de limitar la seriedad de los asaltos.