



EXECUTIVE SUMMARY

ABSTRACT

Childhood physical and sexual abuse is a major public health problem that has devastating, long-term effects on children, if not addressed. School based prevention programs are a viable solution to address this problem. However, the majority of research has focused on school based sexual abuse prevention programs. Very few studies have focused on prevention programs that combine physical and sexual abuse. The purpose of this study was to evaluate the Play it Safe!® program, a school-based physical and sexual abuse prevention program intended to increase the likelihood that children will recognize abusive situations, learn how to respond to potentially abusive situations and report the abuse to someone who can help stop the abuse. Analyses of pilot data suggest that Play it Safe!® increases elementary school children's understanding of physical and sexual abuse concepts as mean pre- and post-test scores revealed overall gains in physical and sexual abuse knowledge across kindergarten through fifth grade. In addition, differences in mean pre- and post-test scores were statistically significant at all grade levels except for kindergarten. "Play it Safe!® is a promising, evidence-based program based on the results of this study. Child abuse has far reaching consequences that can affect children's immediate and long-term wellbeing. Continuing to find effective ways to prevent child abuse is paramount and has clear benefits to individuals as well as society.

THE PROBLEM

Childhood physical and sexual abuse continues to be a major public health problem (Geeraert, Van den Noortgate, Grietens, and Onghena, 2004; Klevens & Whitaker, 2007). The United States Department of Health and Human Services' (USDHHS) Child Maltreatment report (2013) indicated that 18.3% of children were physically abused and 9.3% of children were sexually abused in 2011. Another study reported that one in four children (28.4%) had been physically abused and one in 25 children (4.5%) had been sexually abused by the time they started sixth grade (Hussey, Change, & Kotch, 2006).

School-based programs are the most popular type of child abuse prevention program (Davis & Gidycz, 2000; Putnam, 2003). These programs provide information and education to children about appropriate versus inappropriate touch, the importance of disclosing the abuse if it occurs, how to recognize and avoid potentially abusive situations, as well as teach children protective strategies (e.g. assertiveness skills, avoiding strangers) intended to reduce their overall level of risk (Chaffin & Friedrich, 2004; Finkelhor, 2007; Ko & Cosden, 2001; Putnam, 2003).

Most evaluations of school-based abuse prevention programs are concerned with their effectiveness. Geeraert et al. (2004) reviewed 40 early prevention evaluation studies and found that these studies produced highly significant overall positive results. Several meta-analyses and reviews of studies reported that school-based sexual abuse prevention programs are effective in teaching children knowledge and skills intended to prevent sexual abuse (Davis & Gidycz, 2000; Finkelhor, 2009; Finkelhor & Dzuiba-Leatherman, 1995; Kenny, Capri, Reena, Thakkar-Kolar, Ryan, & Runyon, 2008; Topping & Barron, 2009; Tutty, 1995; Wurtele & Miller-Perrin, 1992).

Dhooper and Schneider (1995) found that children who participated in the prevention program were more knowledgeable about child abuse concepts than children who had not participated. Ko and Cosden (2001) confirmed Dhooper and Schneider (1995) results. They found that while all children had a base level of knowledge regarding physical and sexual abuse, children who participated in prevention programs had a better understanding of key components espoused by prevention programs such as attribution of blame for the abuse, perpetrators of abuse can be strangers as well as people close to them and the need to report the abuse.

A large scale study conducted by Finkelhor, Asdigian & Dzuiba-Leatherman (1995) sought to determine whether children who participated in child abuse prevention programs were able to avoid subsequent physical or sexual abuse. While this study's findings confirmed that children who participated in the prevention program were more knowledgeable about abuse prevention concepts, increased knowledge was not associated with a reduction in future victimization nor did it reduce the seriousness of the assault. However, they did find that children who had participated in prevention programs had increased confidence that their actions resulting from the knowledge they gained protected them from more serious kinds of abuse as well as made them more likely to disclose the abuse. Additionally, Gibson and Leitenberg (2000) found that respondents who had participated in a school-based sexual abuse prevention program were significantly less likely to have been sexually abused compared to those who had not participated in such a program. Moreover, Topping and Barron (2009) found that in more than 33% of the studies reviewed, the children had a greater sense of self efficacy, increased self-confidence, and less anxiety and self-blame than the children who had not participated in school-based prevention programs.

There is a need for more research on school based child abuse prevention programs that includes both physical and sexual abuse (Davis & Gidycz, 2000). Finkelhor and Jones (2006) suggested that school-based sexual abuse prevention programs may account for sexual abuse rates falling faster than physical abuse rates. The decline of empirical research in this area indicates a need to continue to investigate and identify the most promising interventions, particularly given the importance of their mission and intended goal (Finkelhor & Jones, 2006). The current pilot study seeks to fill this gap by increasing our knowledge of the efficacy of a combined school-based physical and sexual abuse prevention program.

DESCRIPTION OF THE PROGRAM

Play it Safe![®] is a prevention education program designed to reduce children's risk for becoming victims of physical and sexual abuse. This program was created by The Women's Center in Fort Worth, Texas in 1983. Play it Safe![®] helps children "recognize, respond to, and report" a potentially abusive situation. Through the years, the Play it Safe![®] program has served 60,000 - 102,000 children annually. In 2012, 146 schools participated in the program which included 23 school districts. The program served 82,296 children (60,468 were elementary school age; 13, 806 were in middle/junior high school and 8,022 were in high school).

The Play it Safe![®] scripted curricula were created by professional staff of The Women's Center of Tarrant County, social workers, and staff preventionists. The curriculum continues to be updated as new information regarding physical and sexual abuse becomes available, such as online safety and stalking. The curricula include age-appropriate, grade specific (pre-kindergarten through 12th grade) presentations, and are comprised of a trainer script, Joe and Suzy dolls (pre-kindergarten through 2nd grade), coloring books (pre-kindergarten through 1st grade) and DVD. Locally, the training was also delivered in Spanish; and the videos, pre-tests and post-tests were in English. All Play it Safe![®] curricula teach children and youth to : (1) *recognize* an abusive situation, (2) *respond to* potentially abusive

situations, and (3) *report* the incident to an adult that they trust, emphasizing that abuse is *never* their fault. The Play it Safe!® program serves youth in pre-kindergarten through 12th grade. Programs for middle and high school students include topics ranging from sexual harassment, sexting and cyberbullying, to non-stranger sexual assault.

PURPOSE OF THE STUDY

The purpose of this study is to evaluate the effectiveness of a school based child abuse prevention program. Play it Safe!® is believed to work for several reasons: 1) the program has existed 30 years; 2) post-test only data suggested that the youth have learned how to better protect themselves; and 3) the number of disclosures has steadily increased over the years. However, more extensive research was needed to establish this program as evidence based.

DATA COLLECTED

The study was conducted from January 2011 through June 2013. Each grade level was given different pre- and post-test questions because the curriculum is designed to be age and developmentally appropriate, and therefore differs by grade. All of the pre- and post-test questions were created based on language that is consistent with the curriculum by grade. The lead author and a doctoral-level research assistant watched each presentation and read over the curriculum. Then the pre- and post-tests questions were reviewed to assess the extent to which the questions reflected the curriculum. The pre-test and post-test questions were piloted from January 2011 through June 2011 prior to the start of this study. The results were reviewed collaboratively with the Play it Safe!® staff.

Pre-and post-test questions administered to students were identical. Immediately before delivering the Play it Safe!® presentation, the trainer read the pre-test questions aloud to the students. The trainer read-through each question and wrote down students' corresponding answers ("yes," "no," "I don't know," or "no answer"). The pre-test was administered in this way primarily because trainers had a lot of material to cover in a limited amount of time before moving on to the next classroom. Moreover, many schools were reluctant to agree to pre-testing students if it meant consuming more valuable class time. School administrators and Play it Safe!® staff agreed to this compromise. At the end of the week, the trainers sent the results from each classroom to the researcher and Play it Safe!® staff.

Approximately two weeks after the presentation, schools received the post-tests, along with a self-addressed, postage-paid envelope to return the post-tests to The Women's Center. The classroom teacher administered the post-tests. In the lower grade levels, the questions were read out loud and the students marked their answer on the post-test. The post-tests were already being administered in this way. The program did not have the capability to send trainers back to the school to administer the post-tests. Having teachers administer the post-test was the next best option. If schools took longer than a month to return the post-tests, Play it Safe!® staff followed up with the school counselors, reminding them to complete and return the post-tests.

DATA ANALYSIS

Pre-test and post-test data were analyzed using version 22 of the Statistical Package for the Social Sciences (SPSS). More specifically, the overall proportion of children who responded correctly to each question at the pre- and post-tests was assessed for each of the grade levels. Subsequently, overall mean pre- and post-test scores for each grade level were calculated. Two-tailed dependent samples t-tests then were conducted to test hypotheses that mean pre- and post-test scores were equal.

RESULTS

DISTRIBUTION (ENTIRE SAMPLE UNMATCHED BY CLASSROOM)¹

The total number of students who participated in the pre- and post-tests was 62,124 (31,625 pre-tests and 30,499 post-tests), which was 52% of the 120,743 students who participated in the Play it Safe![®] program from January 2011 through June 2013. Overall, the Play it Safe![®] program was found to be effective. Students knew more about the subject matter after the Play it Safe![®] presentation and did better on the post-test than the pre-test.

TABLE 1: DISTRIBUTION - ENTIRE SAMPLE (UNMATCHED) (N=62,124 STUDENTS)

	Pre-test			Post-test		
Dates Administered	11/08/02 – 6/3/13			1/03/12 – 6/24/13		
Number of classrooms (students)	1541 classrooms (31,625 children)			1532 classrooms (30,499 children)		
Grade Level	Number of Classrooms (Pre-test)	Number of Students	Percentage of Students	Number of Classrooms (Post-test)	Number of Students	Percentage of Students
Kindergarten	206	3870	12%	171	2902	10%
First Grade	197	3742	12%	219	3482	11%
Second Grade	200	3815	12%	224	3903	13%
Third Grade	162	3088	10%	241	4458	15%
Fourth Grade	179	3369	11%	248	4466	15%
Fifth Grade	150	3047	10%	161	3074	10%
Sixth Grade	86	1975	6%	121	3299	11%
Sexting – High School	175	4151	13%	114	4324	14%
Respecting Each Other – Fifth/Sixth Grades	21	430	1%	8	159	Less than 1%
Middle School Child Sexual Abuse -	29	630	2%	7	137	Less than 1%
Sexual Harassment – Middle School	87	2072	7%	10	222	Less than 1%
Rape Get The Facts– High School	49	1076	3%	8	73	Less than 1%
Totals	1541	31,265		1532	30,499	

¹ The results are comprised of all the students who took the pre-test and all the students who took the post-tests. Because we could not match all of the data by classroom, we do not know the number of students who are the same. We are simply measuring the scores of students who took the pre-test and comparing it to the scores of students who took the post-test.

TABLE 2: RESULTS - ENTIRE SAMPLE (UNMATCHED)

GRADE	Pre-test Mean (Standard Deviation)	Post-test Mean (Standard Deviation)	t-statistic
PIS – Kindergarten	.2808 (.07934)	.3766 (.07136)	-.69.019**
PIS – 1 st Grade	.7190 (.14884)	.8589 (.11287)	-112.619**
PIS – 2 nd Grade	.7667 (.14592)	.8782 (.11288)	-116.437**
PIS – 3 rd Grade	.7535 (.14925)	.8536 (.09537)	-138.942**
PIS – 4 th Grade	.7285 (.19710)	.8676 (.11450)	-119.330**
PIS – 5 th Grade	.6477 (.17436)	.8976 (.06283)	-181.275**
PIS – 6 th Grade	.5808 (.15595)	.8862 (.07947)	-141.438**
Respecting Each Other – 5 th /6 th Grades	.7695 (.07010)	.8861 (.04608)	-54.388*
Middle School Child Sexual Abuse –	.5921 (.13249)	.8852 (.05663)	-41.356*
Sexting – High School	.7137 (.12891)	.8434 (.13910)	-64.741**
Sexual Harassment – Middle School	.6628 (.20221)	.8389 (.06337)	-41.863**
Rape Get The Facts - High School	.5534 (.11818)	.7902 (.09290)	-24.057*

* $p < .05$; ** $p < .01$

Analyses of the pilot data suggest that the Play it Safe![®] program increases children’s understanding of physical and sexual abuse . Analyses of mean pre-test and post-test scores were statistically significant, and across all grade levels revealed overall gains in children’s understanding of physical and sexual abuse prevention, how to take appropriate protective strategies, and the importance of disclosure.

SELECTED RESULTS (KINDERGARTEN THROUGH 5TH GRADE – MATCHED BY CLASSROOM)²

Table 3 presents the distribution of children who participated in the Play it Safe![®] program by grade-level.

TABLE 3: DISTRIBUTION - SAMPLE (MATCHED)

Grade Level	Number of Classrooms	Number of Students	Percentage of Students
Kindergarten	7	114	13%
First Grade	13	231	25%
Second Grade	5	91	10%
Third Grade	11	202	22%
Fourth Grade	9	172	19%
Fifth Grade	5	103	11%
Totals	50	913	

Table 4 presents a comparison of mean pre-test and post-test scores for all matched K- fifth-grade children.

TABLE 4: RESULTS - SAMPLE (MATCHED)³

Grade Level	Mean Pre-Test Score (Standard Deviation)	Mean Post-Test Score (Standard Deviation)	t-statistic
Kindergarten	.5936 (0.2661)	.7849 (0.1462)	-1.6667
First Grade	.6904 (0.1745)	.8508 (0.0999)	-2.8772**
Second Grade	.7776 (0.065)	.8916 (0.0651)	-2.7696*
Third Grade	.7365 (0.1574)	.9006 (0.0344)	-3.3786**
Fourth Grade	.6581 (0.1993)	.9226 (0.0358)	-3.9187**
Fifth Grade	.7582 (0.1484)	.9000 (0.0393)	-2.0652*

* $p < .05$; ** $p < .01$

Analyses of the pilot data suggest that the Play it Safe![®] program increases elementary age children’s understanding of physical and sexual abuse . Analyses of mean pre-test and post-test scores revealed overall gains in children’s ability to recognize, respond to and report physical and sexual abuse across

² A more detailed explanation of these results is published. Blakey, Joan M. and Thigpen, Jeffrey W. (2015) "Play it Safe![®]: A School-Based Childhood Physical and Sexual Abuse Prevention Program," *Journal of Adolescent and Family Health*: Vol. 7: Iss. 1, Article 5. <http://scholar.utc.edu/jafh/vol7/iss1/5>

³ These results were matched by classroom. Included in this table are only results for which a teacher’s name could be matched, and the number of students could be matched, to pre-test and post-test. Fifty classrooms could be matched, which is why the sample size is small compared to the entire results collected.

most grade levels. Differences in mean pre-test and post-test scores were statistically significant at all grade levels except kindergarten. There was a significant difference in unmatched test results for kindergarten, but not in the kindergarten matched group.

DISCLOSURE OF PHYSICAL AND SEXUAL ABUSE

During and after the Play it Safe!® presentations, children disclose that they have experienced physical abuse, sexual abuse or both. When this happens, the Play it Safe!® trainers will follow-up with these children, notify school personnel, and make a formal report to child protection.

TABLE 5: NUMBER OF DISCLOSURES OF PHYSICAL AND SEXUAL ABUSE

DISCLOSURES	2012 (January 1 – December 31, 2012)	2013 (January 1 – May 31, 2013)
Total Physical Abuse	110	44
Total Sexual Abuse	68	32
Both	3	6
Total Disclosures	181	82

LIMITATIONS

Despite the positive results, these findings should be interpreted cautiously in light of the limitations of the study’s design. The use of a control group/delayed control group design would have added rigor and helped control for threats of internal validity. The researchers believed that this information was vital for every child to receive and therefore did not want any children to be left out. More individual grade level tests that were matched to examine pre-post changes would have strengthened the results. Schools were willing to participate only if children’s individual answers could remain anonymous. Another limitation is that each grade has a different test. While all the Play it Safe!® elementary grades curricula emphasis is the same, the topics are addressed in an age and developmentally appropriate way. The pre-test and post-test questions are different because the language and topics are discussed differently by grade. In addition to the different pre-tests and post-tests by grade, kindergarten, 1st and 2nd pre-test and post-tests only have five items, while tests for 3rd through 5th grades have 10 items. There is concern about whether five items can adequately measure children’s understanding of physical and sexual abuse. While this is a valid concern, the researchers opted for a 5-item questionnaire so as to avoid overburdening younger (5 to 7 years old) students. Additionally, the different ways the pre- and post-tests were administered is another limitation. Due to time and school district constraints, having the trainers read the pre-test aloud and record answers and teachers administering the post-tests was the only way many of the school districts would agree to adding the pre-test component.

Another limitation was surveying children under seven years of age. In order to mitigate this developmental challenge, pre- and post-tests are read out loud to these children, and they circle a smiley face, sad face, or a question mark in response to the statement. Another limitation is that possible recall bias (e.g. students remembered the questions from the pre-test) was introduced for students who took the post-test such that their gains were due to remembering the question rather than lessons learned in the program. While this is possible, the right answers to the questions were never revealed to the students, so while they may have remembered the question, they did not know whether their initial answer was correct or incorrect.

Finally, a limitation is that some children took the post-test two weeks after the presentation, while others took it a month after the presentation. This can be interpreted one of two ways. One way is that the presentation was powerful enough for children to still remember major concepts after a longer period of time. Another possible interpretation is that children were exposed to other information about

child physical and sexual abuse concepts and that the gains are in fact due to other factors. Certainly this is possible even at the two week mark. However, the fact that overall children did better on post-tests than pre-tests would suggest that there was benefit to participation in the Play it Safe!® program.

CONCLUSION

Child abuse has far reaching consequences that can affect children's immediate and long-term wellbeing (Lundahl, Nimer & Parsons, 2006). Continuing to find effective ways to prevent child abuse is paramount and has clear benefits to individuals, as well society. Play it Safe!® was found to be effective for teaching children to recognize, respond to, and report abuse. It was found to increase children's understanding of abuse, as well as their ability to identify potentially abusive situations. The presentations increase children's willingness and ability to disclose abuse by reminding them of the importance to keep on telling an adult until the abuse stops. Effectiveness can be increased in programs such as this by involving parents/caregivers, which provides the opportunity to reinforce the knowledge and learned skills at home (Finkelhor & Dzuiba-Leatherman, 1995). Finally, Play it Safe!® helps to reduce self-blame and internalization of negative thoughts/feelings pertaining to the abuse by reiterating that it is not the child's fault. There is a need for more empirical research of school-based prevention programs that combines both physical and sexual abuse, given that physical abuse and neglect are more prevalent in our society (USDHHS, 2013). As one of a few evidence-based programs, Play it Safe!® seeks to fill this gap by increasing our knowledge of the efficacy of a combined school-based physical and sexual abuse prevention program.

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