

EVALUATION OF A COMMERCIALY AVAILABLE PROGRAM AND IN SITU TRAINING BY PARENTS TO TEACH ABDUCTION-PREVENTION SKILLS TO CHILDREN

KIMBERLY V. BECK AND RAYMOND G. MILTENBERGER

UNIVERSITY OF SOUTH FLORIDA

Child abduction is a serious problem; therefore, it is essential that researchers evaluate the efficacy of commercially available abduction-prevention programs. A multiple baseline design across participants (ages 6 to 8 years) was used to evaluate the effects of a training program, The Safe Side. Experimenters assessed safety responses in situ in two different situations (knock on the door and interaction by a stranger in public). Results revealed that participants did not demonstrate the safety skills following Safe Side training. All participants subsequently received in situ training (IST) implemented by the parent. Additional assessments and IST were conducted until each participant performed the skills to criterion. All participants demonstrated criterion performance following IST and maintained the skills over time.

DESCRIPTORS: abduction, in situ assessment, in situ training, prevention, safety skills

Child abduction is one of many safety threats to children in the U.S. Although it is unlikely that most children will ever experience an abduction situation, there are serious consequences of abduction, including sexual abuse and death. Most child abductions are committed by family members of the victim; however, studies conducted by the U.S. Department of Justice reveal that approximately 58,200 children were abducted in 1999 by nonfamily perpetrators (Finkelhor, Hammer, & Sedlak, 2002). In a nonfamily abduction, perpetrators often use lures to entice a child to go with them voluntarily. Some of the most common lures include offering incentives or asking for assistance to entice the child and using authority to convince the child that the perpetrator has appropriate permission to take the child. Research on child abduction reveals that most perpetrators engage in a friendly interaction to establish rapport with their victims, and children often leave willingly with an abductor after being presented with a lure (Holcombe,

Wolery, & Katzenmeyer, 1995; Marchand-Martella, Huber, Martella, & Wood, 1996; Poche, Brouwer, & Swearingen, 1981; Poche, Yoder, & Miltenberger, 1988). Despite parents' efforts to watch children closely, many children are abducted annually. Nearly a quarter of the nonfamily abductions that occurred in 1999 took place in the home or yard of the victim. The remaining 77% took place in the community (e.g., streets and parks; Finkelhor et al.).

Because research has shown that most child abductions occur when an adult entices the child to leave willingly by delivering an abduction lure, researchers began to evaluate training programs to address this safety threat. Poche et al. (1981) and Marchand-Martella et al. (1996) evaluated the efficacy of behavioral skills training (BST) for teaching abduction-prevention skills. BST, which includes instructions, modeling, rehearsal in either simulated or naturalistic settings, or both, and feedback (praise and correction), has been shown to be effective for teaching a variety of safety skills (Carroll-Rowan & Miltenberger, 1994; Himle & Miltenberger, 2004; Marchand-Martella et al.; Miltenberger & Olsen, 1996; Olsen-Woods, Miltenberger, & Foreman, 1998; Poche et al., 1981, 1988). The results of Poche

Address correspondence to Raymond G. Miltenberger, Department of Child and Family Studies, FMHI, University of South Florida, Tampa, Florida 33612 (e-mail: rmiltenberger@fmhi.usf.edu).

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et al. (1981) and Marchand-Martella et al. revealed that children's safety skills improved greatly from baseline to posttreatment. Additional studies focused on group training and found that following BST, most children learned the skills (Carroll-Rowan & Miltenberger; Olsen-Woods et al.; Poche et al., 1988).

Although participants in previous research demonstrated acquisition of safety skills following BST, some participants failed to engage in the appropriate behavior when assessed during in situ assessments, suggesting that these participants are not likely to demonstrate the safety skills when faced with a real abduction situation (Carroll-Rowan & Miltenberger, 1994; Himle, Miltenberger, Gatheridge, & Flessner, 2004; Miltenberger, Thiesse-Duffy, Suda, Kozak, & Bruellman, 1990). In an attempt to increase the probability of generalization after skills are acquired using BST, researchers have added in situ training (IST) and have found it to be effective (Gatheridge et al., 2004; Himle et al.; Johnson et al., 2005, 2006; Miltenberger et al., 1999, 2004). IST is conducted when the participant fails to demonstrate the safety skills during the in situ assessment. Immediately after failure to use the skills, the trainer appears in the environment and provides on-the-spot training, consisting of further rehearsals of the safety skills, until the participant exhibits the correct response three to five consecutive times in the environment in which the safety threat just occurred (Egemo-Helm et al., 2007; Gatheridge et al.; Himle et al.; Johnson et al., 2005, 2006; Miltenberger et al., 1999, 2004, 2005).

Johnson et al. (2005) taught abduction prevention skills to 13 preschool children using BST and IST. After initial training with BST, IST was implemented for any participant who failed to demonstrate the safety skills. Posttraining and follow-up assessments revealed that participants acquired and maintained the abduction-prevention skills. Johnson et al. (2006) evaluated BST alone versus BST plus IST in a small-group format. Both treatment groups performed signif-

icantly better than the control group. At the 3-month follow-up, the BST plus IST group performed better than the BST-alone group.

Although much of the research supports IST as an effective approach to teach prevention skills, it requires trained professionals, is time consuming, and can be costly to arrange. BST and IST most often are implemented on a one-to-one basis and thus are not practical approaches for reaching the large numbers of children who could benefit from training. In an effort to streamline training and make it more accessible, researchers have evaluated the use of video training procedures (e.g., Carroll-Rowan & Miltenberger, 1994; Poche et al., 1988). In each of these studies, video modeling plus behavioral rehearsal and feedback were effective in teaching abduction-prevention skills.

Researchers have also evaluated the efficacy of commercially available programs that are potentially more accessible to mass audiences and thus may reach more children simultaneously (e.g., Gatheridge et al., 2004; Himle et al., 2004; Kelso, Miltenberger, Waters, Egemo-Helm, & Bagne, 2007). Most of this research has focused on evaluating commercial programs for teaching skills to children to prevent firearm injuries. For example, the Eddie Eagle GunSafe program, available for purchase from the National Rifle Association (NRA), has been used with over 15 million children in the United States, according to figures provided by the NRA. Himle et al. (2004) found that the Eddie Eagle program was not effective with 4- and 5-year-olds, and Gatheridge et al. (2004) found similar results with 6- and 7-year-olds. However, Gatheridge et al. and Kelso et al. (2007) showed that IST following the Eddie Eagle program increased the effectiveness of the program (almost all children in both the Eddie Eagle and the BST groups demonstrated the skills following one IST).

A recent Internet search on child abduction-prevention programs revealed several commercially available programs designed to teach

children the skills to avoid abduction. One popular program, The Safe Side, employs a video training approach with instructions and modeling of safety skills to teach abduction-prevention skills to children ages 5 to 10 years old. Similar to other safety skills programs that have been shown to be effective (Johnson et al., 2005, 2006; Marchand-Martella et al., 1996; Poche et al., 1981) The Safe Side program instructs children to say no, get away, and tell a parent or other safe adult when presented with a potential abduction situation. Although the program uses a video-modeling approach similar to those found effective in previous studies, it lacks rehearsal and feedback components, which are critical to a program's efficacy (Carroll-Rowan & Miltenberger, 1994; Poche et al., 1988).

Although The Safe Side Web site (www.thesafeside.com) hosts a page of testimonials regarding the efficacy of the training program and lists the numerous awards the program has received, there is no published research that has examined the program's efficacy. It would be beneficial for researchers to examine commercial programs that can be purchased on the Internet by any family, school, or other entity interested in teaching safety skills. If such programs are found to be effective, many more children could receive training in less time and with fewer resources. Furthermore, by examining the efficacy of commercially available prevention programs, researchers can identify modifications that can be made to increase a program's effectiveness, if necessary. Therefore, the purpose of the current study was to evaluate the efficacy of The Safe Side abduction-prevention program. A second purpose was to evaluate the effectiveness of IST implemented by the parent for any child who did not demonstrate the skills following the evaluation of the program.

METHOD

Participants and Settings

Participants were 5 girls and 1 boy, ages 6 and 8 years, living in a southern metropolitan

area. All of the participants were recruited through a college-wide e-mail to staff at a local university to request their children's participation. Selection criteria included age, absence of any known mental health disorders or disabilities, absence of prior abduction-prevention training, availability to participate in multiple assessments, and the receipt of written, informed parental consent. The study was reviewed and approved by the university institutional review board.

Assessment and training took place in the children's homes and in a variety of locations in the community. Thirteen (3 men and 10 women) graduate students in an applied behavior analysis master's program acted as the confederates and data collectors. Each confederate conducted one or two assessments per child. If a confederate conducted a second assessment with a child, it was a minimum of 2 months later, and the confederate changed his or her appearance.

Materials

The Safe Side training DVD titled "Stranger Safety" was used in the study. The DVD is 42 min long and provides several "hot tips" to teach abduction safety skills to children ages 5 to 10 years old. The objective of the video is to teach children with instructions and modeling to respond safely in various possible abduction situations. These responses included the safe way to respond to a knock on the door, to an abduction lure, and to an adult who violates the child's personal space.

Target Behaviors

The target behaviors were the safety skills used in response to two different potential abduction situations that were addressed in the DVD: (a) the knock on the door and (b) the approach. Multiple scenarios were developed for each of the two situations, and no scenario was used more than once with any one participant during any of the assessments (i.e., the location was not repeated, or the nature of

the visit to the store was different). The safety skills for each situation were coded with the numerical values described below.

The knock on the door. In response to a knock on the door when the parent was not present in the room, the target safety skill was not to answer the door and to go tell the parent that someone was at the door. Observers coded the safety skills on a 3-point scale as follows: 0 = *opens the door independently* (without parental permission), 1 = *does not open the door but does not tell parent*, 2 = *does not open the door and tells parent that someone knocked on the door*.

The approach. The approach involved a scenario in which an adult violated a child's personal space by walking up to a child in a public place, standing close to the child, and talking to the child. Observers scored the safety skills (gets away immediately and tells an adult) on a 3-point scale as follows: 0 = *stays in proximity of confederate* (regardless of whether or not the child reports the incident); 1 = *gets away immediately, but does not tell an adult*; 2 = *gets away immediately and tells an adult*. Getting away immediately was defined as leaving the proximity of the confederate within 10 s of initiation of speech by confederate and traveling a minimum of 1.7 m away from the confederate in the direction of his or her parent (or reaching the parent).

A decision was made to use the approach instead of an abduction lure to measure abduction safety skills for two reasons; one was that the approach, in which the adult engages the child in pleasant conversation, is a precursor to the delivery of the abduction lure (Poche et al., 1981), so it is most safe for the child to respond before the lure is delivered. The second reason was that the child was less likely to be frightened when presented with this situation than when presented with an actual lure involving a request to leave with the adult. Although an adult might engage a solitary child in conversation without any intent to abduct the child, the most conservative response was

for the child to respond to this potentially dangerous interaction by getting away and telling a parent.

Assessment

The safety skills relevant to each of the two potential abduction situations were assessed through in situ assessments conducted before and after training. At no point during or following completion of the study were the participants made aware of their participation in the assessments. During an in situ assessment, the child was at the home or taken to a community setting by the parent and was unaware that assessment was taking place. Each assessment was approximately 3 to 5 min in duration. Both the researcher and the parent independently recorded the participant's response using paper and pencil. Data were collected outside the participant's view.

During the knock-on-the-door situation, the confederate knocked loudly on the door using five consecutive raps (if there was a doorbell, the confederate rang the bell in conjunction with knocking on the door). The confederate waited 10 s for the door to be answered before knocking again. The confederate waited another 10 s if the door was not answered and knocked one final time, for a total of three knocks.

During the approach situation, the parent took the child to a community location for a legitimate purpose (e.g., shopping, playing in the park) and left the child's immediate vicinity. Once the parent was away from the child, a confederate approached the child and began speaking with the child by saying something relevant to what the child was doing (e.g., "that's a good cereal; my daughter really likes Lucky Charms, do you?"). If the child spoke and stayed in the confederate's proximity, the confederate responded with one brief statement. If the child did not get away, the confederate waited 10 s and then left. For both situations, if the child exhibited the correct safety skills, the parent provided praise to the child for reporting the situation. A wide variety of community

locations was used to ensure an adequate assessment of the generalized use of the safety skills. The community locations included the child's front and backyards, grocery stores, office stores, public parks, clothing department stores, a video store, a dollar store, a pharmacy, big box stores, a sporting goods store, a bank, a public library, a fast food restaurant, and a dine-in restaurant.

Follow-up was conducted using in situ assessments 4 to 22 weeks after training to assess maintenance of the safety skills during the approach situation only. If the child demonstrated the skills, the parent provided descriptive, enthusiastic praise. If the child did not demonstrate the appropriate skills, the parent was instructed to provide IST.

Observers and Interobserver Agreement

The confederate served as the primary observer for whether the child opened the door and got away immediately (when relevant). In both situations, the parent acted as the primary observer for whether the child reported that someone was at the door or that a stranger spoke to him or her in the community. The parent or another trained research assistant acted as the reliability observer.

Interobserver agreement was calculated separately for approach and for knock on the door. Interobserver agreement was calculated by dividing the number of agreements by the number of agreements plus disagreements for each of the targeted responses. This number was then converted to a percentage. Two observers recorded whether the child got away within 10 s during 52% of approach assessments, and two observers recorded whether the child told the parent during 43% of approach assessments. Interobserver agreement was 97% for getting away and 100% for telling. Two observers recorded whether the child answered the door during 45% of knock assessments, and two observers recorded whether the child told the parent during 43% of knock assessments. Interobserver agreement was 94% for whether

or not the child answered the door and 100% for whether or not the child reported that someone knocked.

Side Effects and Social Validity Questionnaire

The experimenter administered a six-item questionnaire to parents (Johnson et al., 2005) to assess any possible changes in their children's behavior after training and to assess parental attitudes concerning training. The questionnaire was e-mailed to the parents of children who completed the study.

Experimental Design and Procedure

A nonconcurrent multiple baseline design across participants was used to evaluate the efficacy of The Safe Side DVD and IST if needed.

Baseline. Participants received two to five in situ assessments for each situation during baseline. No feedback was provided for their performance during assessments. Because the intervention (viewing the DVD) occurred for both situations simultaneously, the timing of implementation of the intervention was based on the stability of the data in one of the two situations. We chose the approach situation because we deemed the use of safety skills in this situation to be most important.

Safe Side DVD. Each participant viewed the DVD in his or her home. The 42-min DVD employs a passive teaching approach involving instructions and modeling of the safety skills across a variety of scenarios. By watching the video, the child received training on both dependent variables that we reported in the study. Within 1 week after viewing the DVD, another assessment for each situation was conducted. If the participant failed to demonstrate the appropriate safety skills during the in situ assessment, IST was conducted by the parent.

IST. Prior to this phase, the parents received instructional documents (including a script and protocol) and brief verbal modeling using examples of relevant situations. The first author

provided further assistance to the parent during the first IST session by modeling missed steps and providing immediate feedback. The experimenter provided continuous feedback and discussion to the parent throughout the study via phone. When the child failed to demonstrate the safety skills in the approach situation, the parent walked up to the child, and the confederate immediately left the situation. The parent identified the safety threat and the danger it posed, prompted the child to state the correct responses, modeled the appropriate skills for the child if necessary, and engaged the child in three consecutive role plays of the same scenario. For the first IST session, the first author showed up in the situation and acted as if the meeting was coincidental. The parent introduced the investigator to the child as a friend or colleague and asked the investigator to act as the stranger to help them practice the scenarios. The scenario was then practiced three consecutive times, and the training session lasted approximately 5 min. In all subsequent IST sessions (conducted after any in situ assessment in which the child did not score a 2), the parent followed the same procedure as listed above, but conducted training alone and simulated the presence of a stranger. For example, the parent recreated the scene by sending the child back to the same task and saying to the child, "Pretend you're looking for cereal, and I'm over here getting coffee. Someone you don't know just spoke to you." When the child rehearsed the skills, the parent provided praise. In one case, the parent had a friend play the confederate in the role-play scenarios.

For the knock-on-the-door situation, the parent followed the same protocol by providing praise for correct skills, implementing IST for any missed steps, or both. The IST in the knock situation differed from the approach situation only in that the confederate who had knocked on the door acted as someone whom the parent knew and participated in the three practices of the safety skills. Within 1 week following IST,

an in situ assessment was conducted to assess the child's use of the safety responses for the situation. If the child demonstrated the safety skills, the parent provided enthusiastic praise. If the child failed to perform the skills for the situation, the parent implemented IST. Further in situ assessments were conducted, with additional IST sessions as needed, until the child engaged in the desired safety skills in three consecutive in situ assessments.

Booster training session. The researcher provided a booster training session for Meghan and Alyssa because they did not achieve criterion performance (three consecutive scores of 2) after several in situ assessments following DVD viewing and IST. The booster session followed a BST format that included instructions, modeling, rehearsal, and feedback. The training session was conducted at the home of the 2 participants (the participants were siblings) and included both participants and both parents.

Training began with the researcher discussing what the children should do if a stranger knocked on their door or approached them in public and their parent was not next to them. The remainder of training pertained only to the situation of a stranger approaching the child in the community. The researcher modeled the appropriate safety skills and then had each child rehearse several different scenarios four times. The parent practiced providing enthusiastic praise to each child as he or she demonstrated the appropriate skills.

Following the booster session, the parents took the 2 children to a store. Each parent paired off with a child and headed to a separate section of the store. Once they were in different sections of the store, 1 child was presented with an in situ assessment and IST. A few minutes later, this procedure was implemented for the other child.

RESULTS

During baseline, the participants' scores in the approach situation varied from 0 to 1 (Figure 1). Meghan, Caleb, Sandie, and Kaitlyn

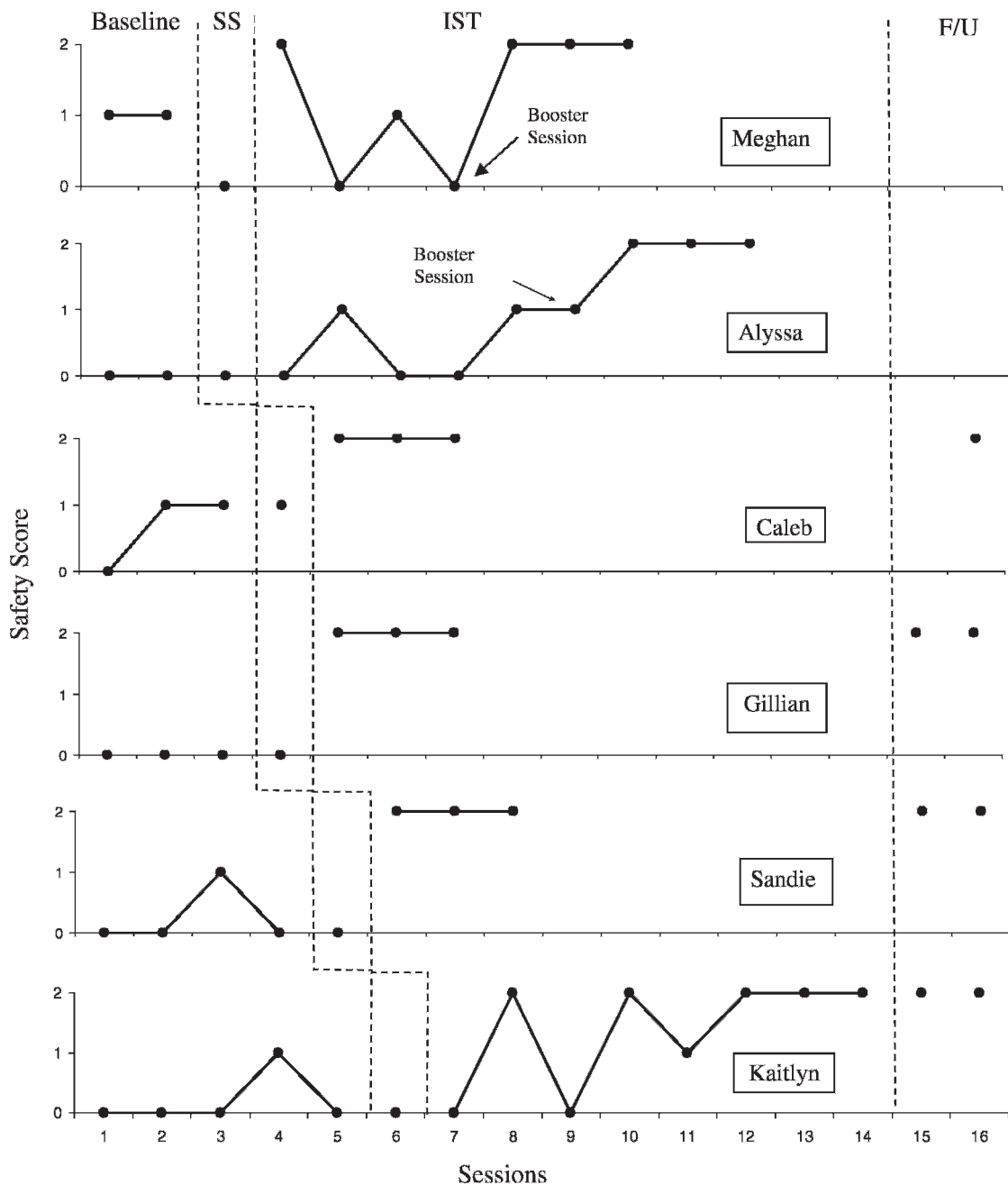


Figure 1. Safety scores across participants during the approach situation.

left the confederate's proximity within 10 s of being approached at least once during baseline, but none of the participants reported to their parent that they were approached and spoken to by a stranger. After viewing the DVD, all but 1

participant (Caleb), received a score of a 0. Caleb received a score of 1, because he left the area of the confederate but failed to report to the parent. He had achieved a score of a 1 for two of the three baseline data points.

IST was implemented for all of the participants following the DVD viewing. Following IST, Caleb, Gillian, and Sandie achieved criterion performance immediately, and Kaitlyn achieved it more gradually. Alyssa and Meghan did not achieve three consecutive scores of 2 following IST, even after four or five IST sessions. For these individuals, the researcher implemented a booster session. Following the booster session, additional approach assessments were conducted, and both participants rapidly achieved criterion.

Skill maintenance was assessed during the approach situation for Sandie, Gillian, Kaitlyn, and Caleb (Meghan and Alyssa were unavailable for follow-up assessments). Sandie, Gillian, and Kaitlyn participated in two follow-up assessments, the first taking place 4 weeks after their last assessment and then another 8 to 18 weeks later. Caleb participated in a follow-up assessment 19 weeks after his last assessment. During all of the follow-up assessments, all 4 of the participants got away from the confederate and reported the approach to their parent, thus demonstrating maintenance of the safety skills.

Caleb, Gillian, Sandie, and Kaitlyn demonstrated the appropriate safety skills during the knock situation in baseline (Figure 2). After viewing the DVD, the 4 participants maintained their performance throughout the remainder of the assessments. Meghan and Alyssa both scored 0 during all baseline assessments and following the DVD viewing. They received IST, immediately achieved criterion performance during the next assessment, and maintained the skills for three consecutive assessments.

The parents of all 6 participants filled out the social validity/side effects questionnaire, and the results are displayed in Table 1. Three of the 6 reported no change in their child's behavior, 2 reported moderate changes, and 1 reported substantial change. Five parents who completed the survey reported that they were very pleased

(the remaining parent reported that she was pleased) with their child's participation.

DISCUSSION

The current study evaluated the efficacy of The Safe Side DVD in teaching abduction-prevention skills to children. The results of this study suggest that the DVD is not effective in teaching children to engage in abduction-prevention skills when approached by a stranger in the community. We measured two of the skills addressed in the video (responding to an approach by a stranger in public and responding to a knock on the door). None of the children demonstrated the appropriate safety skills for responding to a stranger's approach after viewing the video; in fact, all of the participants except 1 scored a 0 when approached by a stranger. Furthermore, for the 2 children who did not already possess the skills of responding safely to a knock on the door, the DVD did not result in acquisition of the skills.

These results are important because they showed that a commercially available prevention program alone failed to teach safety skills to children. Parents should be made aware that their children may not learn the skills necessary to avoid abduction as a result of The Safe Side video training alone. These results are not surprising, because the video is information based, and although it uses video modeling, it does not employ the active learning approach that is effective at teaching skills (Miltenberger, 2008). The current findings are similar to those of Himle et al. (2004) and Gatheridge et al. (2004), in which the investigators found that an information-based gun safety program (the Eddie Eagle GunSafe program) was not effective at teaching skills to avoid firearm injuries. However, the findings are similar to those of Gatheridge et al. (2005) and Kelso et al. (2007) showing that IST can be effective following ineffective training with an information-based program.

Although this study adds to the growing literature validating IST, it is only one of two

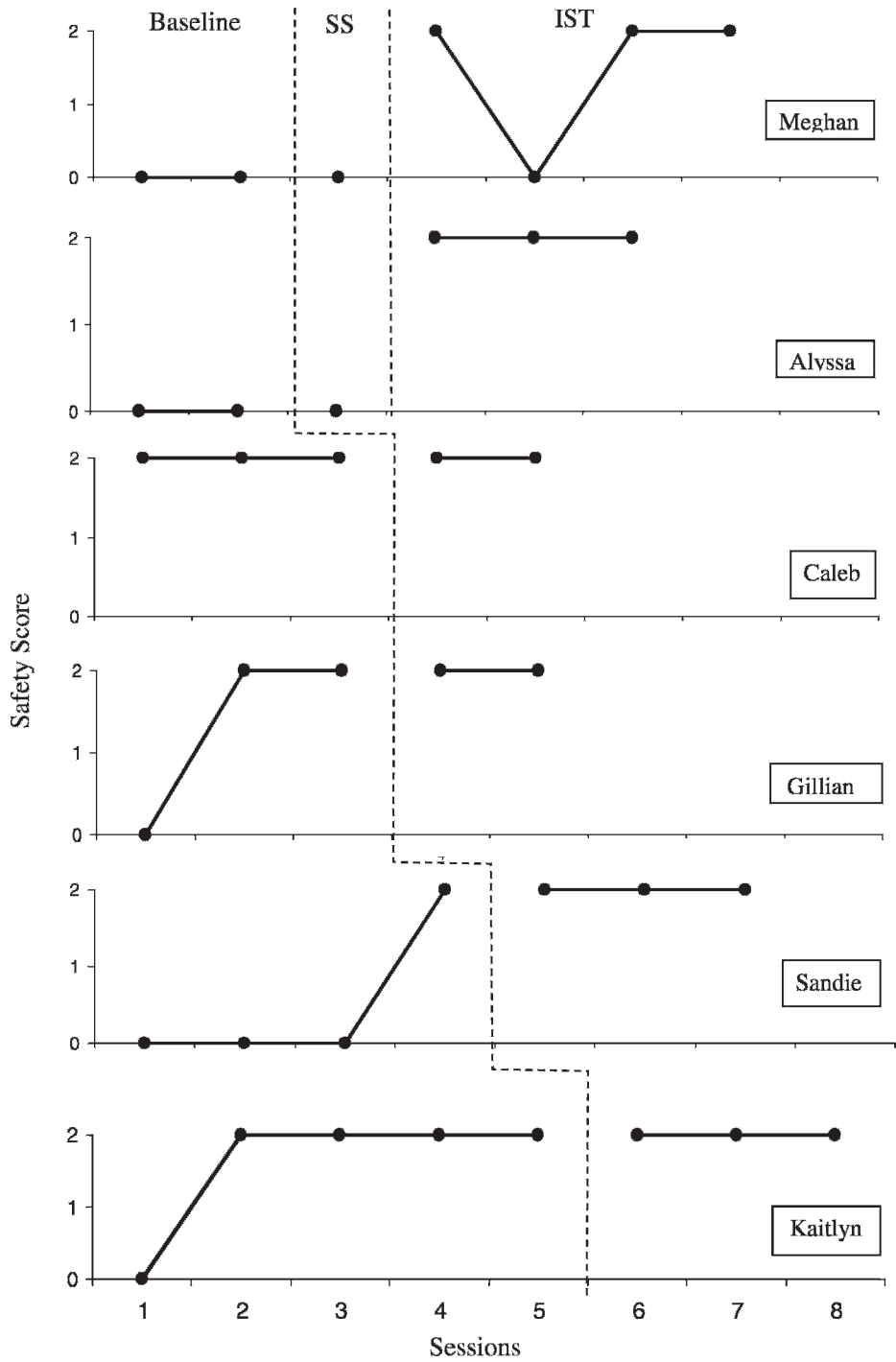


Figure 2. Safety scores across participants during the knock-on-the-door situation.

Table 1
Social Validity Results

Participant	Child's behavior change				Participation	
	Scared	Cautious	Upset	Other changes	Pleased with child's participation	Satisfaction with researchers' communication
Alyssa	No change	No change	No change	"Somewhat more observant of strangers"	Very pleased	Very satisfied
Caleb	Much more scared	No change	Much more upset (child had a related nightmare)		Very pleased	Very satisfied
Kaitlyn	A little more scared	A little more cautious	A little more upset	When asked to sit alone, child says, "But what if someone tries to talk to me?"	Pleased	Very satisfied
Sandie	A little more scared	A little more cautious	A little more upset		Very pleased	Very satisfied
Meghan	No change	No change	No change	"Somewhat more observant of strangers"	Very pleased	Very satisfied
Gillian	No change	No change	No change		Very pleased	Very satisfied

studies that support the efficacy of IST when implemented by persons other than trained researchers. Only one other study (Gross, Miltenberger, Knudson, Bosch, & Breitwieser, 2007) showed that IST can be implemented by parents. Gross et al. showed that parents can successfully implement IST when teaching gun safety skills to children. This finding is significant because of the time and cost that IST can require. It would be beneficial if parents and teachers could be trained to implement training to reduce cost and potentially to teach more than one child at a time.

In the present study, the parents of 2 of the participants had difficulty implementing IST with fidelity. The researchers were not able to consistently collect fidelity data; however, parental and confederate reports to the researchers suggested that some parents deviated from the protocol. For example, in one instance, Meghan failed to demonstrate the skills, and her father approached her and asked her why she was talking to strangers. Her father did not conduct rehearsal or provide feedback during this session. During an assessment for Kaitlyn, she walked away immediately after the confederate approached her and failed to report the approach to her mother. Her mother asked her

what she was supposed to do, and Kaitlyn reported that "no one spoke to her because she got away so there was nothing to report." Kaitlyn's mother reported that she spoke to her about the importance of reporting that a stranger talked to her, but they did not rehearse. During an assessment for Alyssa, she failed to demonstrate any of the skills, but her father did not conduct any part of the training. He later reported that he thought that the confederate signaled to him that Alyssa performed the correct skills (even though she did not go to her father and report the approach). In addition, Alyssa's and Meghan's father used little to no praise for correctly performed skills during the assessments, which also suggests a deviation from the protocol.

Following several reports from Meghan's and Alyssa's parents indicating their deviation from the training protocol, the researcher conducted a booster session and subsequently accompanied the parent on one assessment to conduct IST. A possible explanation for the lack of fidelity is that parents did not receive adequate training to conduct IST. The researcher gave parents a protocol to follow and had discussions with them, but they did not receive BST to learn to conduct IST. Future research should include a

parent-training component that includes rehearsal and feedback to ensure that the parents learn the skills necessary to implement IST properly.

A noteworthy aspect of this study is that it is the first to assess abduction-prevention skills in response to a situation in which an unknown adult approaches and talks to a child in public but does not deliver an abduction lure. The findings suggest that children can learn to use the safety skills without an obvious lure being presented. In a previous study, Johnson et al. (2005) experienced participant dropouts due to repeated assessments with abduction lures. In the present study, we experienced no attrition due to the presentation of abduction lures because we were able to eliminate their use. In fact, only 1 participant began and did not continue the study due to scheduling conflicts. By eliminating the presentation of the lure, we were able to assess and teach the same skills without the same degree of risk for participant dropout. Furthermore, the present findings suggest that children may get away from the perpetrator prior to the delivery of a lure, thus suggesting that they may be safer in a potential abduction situation.

Although the elimination of the lure may have decreased the likelihood of negative side effects (frightened children), some parents still reported a change in their child's behavior. Caleb's mother reported that he was much more scared and much more upset. Early in the study, this child also reported a nightmare wherein he was unable to prevent his younger sister from being kidnapped. Despite these concerns, she continued their participation, stating that it was more important that he learn the skills to avoid abduction. At the conclusion of the study, Caleb's mother reported that she was very pleased with her child's participation in the study. Other parents also reported changes in their child's behavior, yet they all continued their involvement in the study and reported high satisfaction with their child's participation.

There are some limitations in the current study that warrant discussion. One limitation, as previously mentioned, is the problem with the fidelity of IST implemented by 2 of the parents. Another limitation is that 1 child reported being much more scared after the study. However, the child's mother remained extremely satisfied with her child's participation.

A third limitation was the timing of assessments. The assessments for most participants took place within a few days of prior assessments or IST sessions. However, due to some scheduling conflicts, it was difficult to conduct the community assessments for Alyssa and Meghan (who are siblings) in a timely fashion. For example, several of their community assessments took place 2 to 3 weeks after prior assessments or IST. Both participants achieved variable scores and never achieved a score of a 2 during this time. The time between assessments may have affected the participants' demonstration of skills. In future research, the timing of assessments should be more carefully controlled in order to assess immediate effects of training and maintenance of these effects.

A fourth possible limitation was the parent's location relative to the participant when the skills were being assessed in the community. The researcher told the parent to send his or her child to complete a task that would require the child to be away from the parent. However, some of the parents were not comfortable with their child being out of sight; therefore, most of the parents remained close enough to see their child (e.g., at the end of an aisle in a grocery store). The location of the parent during assessments could have influenced the data. It is possible that some children used the skills or failed to use the skills during baseline or training phases because the parent was still in sight. Unfortunately, the influence of the parent's location relative to the child cannot be determined. In future research parents should be out of sight during assessments.

Consistent with previous research showing that an informational approach to teaching safety skills is not effective (Gatheridge et al., 2004; Himle et al., 2004), this study showed that children did not demonstrate the correct safety skills after viewing The Safe Side DVD. Also consistent with previous research demonstrating the effectiveness of IST (e.g., Himle et al., 2004; Miltenberger et al., 2004, 2005), the present findings showed that IST conducted by parents was effective in teaching safety skills to children.

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