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TEACHING YOUNG ADULTS WITH DISABILITIES TO RESPOND APPROPRIATELY TO LURES FROM STRANGERS

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We taught 5 adults with mild intellectual disabilities to respond appropriately to lures from strangers. Skills were taught in the classroom first and then in situ. Before training, participants did not walk away from confederate strangers who tried to lure them away. Participants demonstrated appropriate responses during classroom and in situ training, although performance during assessments was somewhat inconsistent. Appropriate responses were observed during weekly maintenance probes and at follow-up assessments for up to 3 months after training.

Key words: intellectual disability, abduction prevention, intervention

The dangers posed by strangers toward individuals with intellectual disabilities (ID) are rarely addressed in school or research settings, although individuals with ID are vulnerable to abuse and exploitation by unknown perpetrators. Adults with ID are at least twice as likely to experience crimes, such as physical and sexual assault (Wilson & Brewer, 1992), than adults without disabilities. Parental concerns over the vulnerability of their children may result in decreased opportunities for independence and participation in community activities. Thus, interventions to teach safety skills are needed for this population.

In prior research on safety skills interventions, typically developing children were taught a threestep safety response when presented with a lure from a stranger: (a) say "no," (b) move away, and (c) report the event to a trusted adult (Miltenberger & Olsen, 1996). These studies employed behavior skills training (BST), an intervention sequence that consists of instructions, modeling, role play, and feedback. BST typically occurred in a classroom. Skill acquisition was then measured in situ (Beville & Gast, 1998), during which a participant was led to a specified location and left alone. A confederate stranger then approached the participant and presented a lure. If the participant did not display the appropriate response during in situ assessments after classroom instruction, in situ training was conducted; the trainer appeared in the environment and rehearsed the skills until the participant exhibited the correct response (Johnson et al., 2006).

A few studies have extended these methods to individuals with ID, finding that classroom training led to skill acquisition in role play, but did not generalize in situ. In situ training,

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however, improved generalization and maintenance (e.g., Gast, Collins, Wolery, & Jones, 1993; Gunby, Carr, & LeBlanc, 2010). Although in situ training and assessments are necessary to promote and assess generalization, they are contrived. Specifically, conducting in situ training immediately after a stranger lure is problematic because the instructor interrupts the lure after an inappropriate response. Some authors have suggested that, with repeated interruptions, the participant could begin to anticipate the arrival of the instructor, putting him or her at risk of failing to respond appropriately to a real stranger (Collins et al., 1992; Miltenberger & Olsen, 1996). Thus, repeated in situ training sessions after a failed in situ assessment might not promote generalization as intended. Finally, in previous research, in situ assessments typically occurred at baseline and posttraining rather than throughout training. Assessment of skill acquisition during training can demonstrate whether participants begin to use the skills in generalized settings while training is ongoing.

This study sought to address methodological limitations of prior research by conducting in situ training with young adults with mild ID as part of the training package. In addition, skill acquisition was assessed throughout training phases, rather than only after training.

METHOD

Participants and Settings

Five young adults with ID participated (see Table 1). All were reported to follow three-part instructions (confirmed through the Vineland interview; Sparrow, Cicchetti, & Balla, 2005), accompanied parents on community outings, interacted with strangers, and did not perform the target behavior during baseline. Confederate strangers (N = 29) were recruited from the authors' professional and personal networks. Confederates varied in age (19 to 58 years, M = 28) and gender (76% female); most were

Caucasian (one was Hispanic). BST was conducted in a classroom. In situ training was conducted in three different community settings for each participant (e.g., coffee shop, grocery store, recreation center). In situ assessments were conducted in multiple community settings that were different from the locations for in situ training (e.g., mall, restaurant, stores).

Dependent Variable and Data Collection

In response to a lure, participants were taught (a) to say "no" within 3 s, (b) to move away within 3 s of the refusal, and (c) to report the event to a trusted adult. Safety ratings for each behavior were recorded as follows: 0 = agreed to leave with the stranger; 1 = did not go with the stranger but failed to say "no"; 2 = said "no" but did not walk away or report; 3 = said "no," walked away, and reported. Participants were considered to have reached mastery if they scored 3 or higher.

During training, the trainer was the primary observer. During in situ assessments, the confederate was the primary observer; a trainer served as a second observer. Two observers independently recorded the participant's behavior during 100% of baseline assessments, 59% of generalization assessments (10 of 17), and 63% of maintenance assessments (20 of 32). Interobserver agreement was 100% for all assessments. Two trainers observed each participant's behavior during 44% of the classroom role-play sessions (7 of 16) and 33% of in situ role-play sessions (5 of 15). Interobserver agreement was 100% for all sessions. In all cases, whether the participant reported the lure was obtained by parental report.

Procedural fidelity collected during training included whether the trainer completed all steps of BST. These data were collected during 44% of the classroom BST (7 of 16) and 33% of in situ training (5 of 15). Procedural fidelity data were also collected during 72% of in situ assessments (50 of 69; 100% in baseline, 59% generalization, 63% maintenance). All measures of procedural fidelity were 100%.

Participant	Age (years)	Diagnosis	Full-scale IQ	Vineland Communication Score
Emma	22	CP, mild ID	53	113
Wyatt	21	Down syndrome	67	72
Ben	23	Autism	68	36
Tim	20	Mild ID, ADD	54	69
Elliott	22	Down syndrome	46	21

Table 1 Participant Characteristics

Note. CP = cerebral palsy; ID = intellectual disability; ADD = attention deficit disorder.

Procedure

A multiple baseline design across participants was used (Kennedy, 2005); the intervention consisted of classroom BST and in situ training. Throughout the classroom and BST training phases, up to four in situ assessments with confederate strangers were completed in coordination with parents. As in previous research, participants were never told that the in situ assessments were simulations so that they would not mistakenly assume that real abduction lures were similar tests (Johnson et al., 2006). Parents provided behavior-specific praise if the participant reported the event (with the exception of baseline).

In situ assessments were completed every 1 to 2 weeks during maintenance until all participants completed the intervention. In situ assessments then were conducted once per month for 3 months. All participants experienced lures from both male and female confederate strangers (77% were conducted by women).

Baseline. Participants experienced three to six in situ assessments. After the parent left the participant alone in a specified location, a confederate stranger approached and delivered one of four types of lures, including general ("Will you come with me?"); authority ("Your mom asked me to pick you up"); incentive ("I will buy you a soda if you come with me"); and assistance ("Can you help me carry this to my car?"). For each assessment, if the participant agreed to go with the confederate stranger, the stranger terminated the interaction and walked away. If the participant did not agree to go, the stranger said "okay" and walked away.

Classroom BST. The participant, a parent, and a trainer participated in daily classroom training sessions. The trainer began by describing what a stranger is, and the four most common types of lures used by strangers. Next, the trainer described the three-step safety response, and the participant orally repeated it. Then, the trainer and parent modeled four examples and two counterexamples of appropriate responding. Finally, the participant practiced appropriate responding in five role plays. The trainer provided behavior-specific praise if the participant responded appropriately and then began the next role play. If the participant did not respond appropriately, the trainer stopped the role play at that point, provided instruction, and repeated the role play. Classroom BST continued daily until the participant independently moved at least five steps away from the trainer within 3 s of a lure on four of the five role plays for 3 consecutive days.

In situ training. Within 1 week of completing classroom BST, the trainer conducted in situ training every 1 to 3 days. At the beginning of the session, the trainer asked the participant to recite the safety response. Then, the trainer and participant completed five role plays. Role-play procedures and scoring were identical to classroom BST. In situ training concluded when the participant met the same performance criterion as in the classroom BST.

Booster sessions. If the participant scored below 3 on an in situ maintenance assessment, a booster



Figure 1. Response rating during in situ assessments across baseline, classroom BST, in situ training, maintenance, and follow-up conditions. Squares represent incentive lures, triangles represent authority lures, diamonds represent assistance lures, and circles represent general lures. Open data points represent lures from a male confederate stranger; filled data points represent lures from a female confederate stranger.

session was conducted 1 week later. Booster sessions were identical to classroom BST.

Social validity and side effects. After the study, the trainer interviewed the participants; parents completed a social validity and side effects questionnaire (Johnson et al., 2006).

RESULTS AND DISCUSSION

Figure 1 depicts each participant's performance during in situ assessments across conditions. During baseline, only Elliott walked away from the confederate. Classroom BST was completed within 3 to 4 days for all participants. During in situ assessments conducted in the classroom BST phase, Emma, Wyatt, and Ben met criterion responding (walked away from the confederate) once in two opportunities, and Elliott met criterion once in three opportunities. All participants met the performance criterion during in situ training within 3 days. During in situ assessments conducted during the in situ training phase, Wyatt met the criterion during both opportunities presented, and Ben met the criterion during one opportunity. Emma and Tim met the criterion once in two opportunities. Elliott did not meet the criterion.

During maintenance, Emma met the criterion on all five occasions, Wyatt met the criterion two of four times, Ben met the criterion all three times, Tim met the criterion two of three times, and Elliott met the criterion one of two times. Finally, all participants but Ben met the criterion on the 1-, 2-, and 3-month follow-up assessments. Ben did not meet the criterion on the first follow-up assessment. He received a booster session and then walked away at Months 2 and 3.

These results indicated that participants acquired the skills without in situ training immediately after a failed in situ assessment. They quickly acquired skills during classroom role play, but skills did not consistently generalize to in situ assessments. To enhance generalization, in situ training was conducted in community settings, and then all participants met the criterion during at least one in situ assessment. Two participants maintained criterion responding, but responding was more variable for the other three. Despite this variable performance, all participants continued to say "no" to the stranger. It is interesting to note that all participants (except Ben at the 1-month follow-up) met criterion responding during follow-up assessments. Because they did not participate in the intervention during the 3 months of follow-up, it is not clear why behaviors increased. One possible explanation is that parents continued to practice responding after training was complete.

Participant interviews and parent report on the social validity and side effects questionnaire indicated that they liked the training and would recommend it to others. After training, parents reported that participants were not more afraid of strangers, and participants reported feeling more comfortable being alone in community settings.

Certain limitations, however, should be addressed in future research. First, as in prior studies, it was difficult to recruit strangers of different ages and ethnicities; the majority of available students in the special education program were young Caucasian women (Gast et al., 1993). Second, parents and trainers faced logistical challenges in scheduling locations and opportunities for in situ assessments (e.g., Tim did not receive in situ assessments during classroom BST). Finally, as in previous research, the participants did not consistently report the lure to an adult.

REFERENCES

- Beville, A. R., & Gast, D. L. (1998). Social safety for young children: A review of the literature on safety skills instruction. *Topics in Early Childhood Special Education*, 18, 222–234. doi: 10.1177/ 027112149801800405
- Gast, D. L., Collins, B. C., Wolery, M., & Jones, R. (1993). Teaching preschool children with disabilities to respond to the lures of strangers. *Exceptional Children*, 59, 301–311.
- Gunby, K. V., Carr, J. E., & LeBlanc, L. A. (2010). Teaching abduction-prevention skills to children with autism. *Journal of Applied Behavior Analysis*, 43, 107–112. doi: 10.1901/jaba.2010.43-107

- Johnson, B. M., Miltenberger, R. G., Knudson, P., Egemo-Helm, K., Kelso, P., Jostad, C. M., & Langley, L. (2006). A preliminary evaluation of two behavior skills training procedures for teaching abduction-prevention skills to schoolchildren. *Journal of Applied Behavior Analysis*, 39, 25–34. doi: 10.1901/jaba.2006.167-04
- Kennedy, C. H. (2005) *Single-case designs for educational research*. Boston, MA: Allyn and Bacon.
- Miltenberger, R. G., & Olsen, L. A. (1996). Abduction prevention training: A review of findings and issues for future research. *Education and Treatment of Children*, 19, 69–82.
- Sparrow, S., Cicchetti, D., & Balla, D. (2005). Vineland Adaptive Behavior Scales (2nd ed.). Circle Pines, MN: AGS Publishing.
- Wilson, C., & Brewer, N. (1992). The incidence of criminal victimisation of individuals with an intellectual disability. *Australian Psychologist*, 27, 114–117. doi: 10.1080/00050069208257591

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