Chapter 16
Using Tactile Prompts to Increase Social-Communicative Skills with Children with Autism

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ABSTRACT

Tactile prompts can be worn by children with autism to cue them to make social initiations to peers and make eye contact and respond to adults' facial expressions. Two previous studies and this author's research document the efficacy of tactile prompts. Teachers and therapists should use tactile prompts to increase social-communicative behavior with children with autism.

INTRODUCTION

Children with autism and other developmental disabilities exhibit delays in communication and social skills (American Psychiatric Association, 2000). It is often the case that children, especially at the higher functioning end of the autism spectrum, have social-communicative skills in their repertoires but do not display them in sufficient quantity. In other words, children with autism often do not communicate spontaneously (Charman, et al., 1997).

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TACTILE PROMPTS

A tactile prompt (e.g., MotivAider) is a device worn on the hip or in a pocket and when it vibrates, it cues children with autism to engage in a social-communicative behavior. This has been shown in two studies (Shabani, et al., 2002; Taylor & Levin, 1998). Taylor and Levin evaluated the tactile prompt with a 9-year-old boy with

autism. They used most-to-least prompting and a second adult prompter to teach the child to make an initiation (e.g., "Mary, I drew a tiger") when the tactile prompt vibrated. The device was set to vibrate every 60 seconds. A multi-phase alternating treatments experimental design verified that the child made more social initiations when he had the tactile prompt in his pocket than when it was not in his pocket.

Shabani and colleagues replicated and extended the effects of the tactile prompt with three children with autism, ages 6-7. The device they used was called a JTECH Series 27 pager that vibrated for 3 to 5 seconds when activated by a remote control. Using a similar most-to-least prompting strategy, the participants were taught to make a social initiation with a toy (e.g., "Look what I have") whenever the pager vibrated. During the teaching phase, edible items were given to the participants when they exhibited social initiations. In an evaluation phase in the context of a reversal design, the participants made more social initiations when the pager vibrated than when no pager was in the participants' pockets. Shabani et al. faded the frequency of pager prompts for two participants and one of those participants maintained high levels of initiations with fewer prompts. These findings were important as the pager prompt was unnoticeable by the participants' peers, and making social initiations provided access to increased opportunities to engage in play with peers.

Given the interesting findings of these two studies, the author of this chapter is conducting a study with three 6-year-old children with autism evaluating the use of a tactile prompt to increase eye contact and responses to facial expressions. Looking at and responding to facial expressions has gained considerable attention in the neurological (Ashwin, Baron-Cohen, Wheelwright, O'Riordan, & Bullmore, 2007; Kleinhans, et al., 2008) and behavioral (Gena, Krantz, McClannahan, & Poulson, 1996; Schrandt, Townsend, & Poulson, 2009) research literature. In this author's study, children were observed in 4-minute sessions playing with toys with the experimenter and 4-minute sessions engaging in conversation with the experimenter. The intervention was putting a tactile prompt on the children's waists and telling them to look at the experimenter and say something about his facial expression (e.g., "I'm doing good," "You look bored") when it vibrated. The children were given practice and feedback. A multiple baseline across participants experimental design (Cooper, Heron, & Heward, 2007) showed that the children made more eye contact and responses to faces with the tactile prompt than without it. The research extends previous research on using tactile prompts to teach social-communication skills.

CONCLUSION

A tactile prompt is a useful device for teaching children with autism spectrum disorders to make social initiations, eye contact, and responses to facial expressions. Its inconspicuousness makes it a non-stigmatizing intervention and there is some evidence that social communicative responses maintain once the tactile prompt has been faded. Teachers and therapists should use tactile prompts to increase social-communicative skills with their children with autism spectrum disorders.

REFERENCES

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: American Psychiatric Association.