Chapter 33
Video Modeling for Individuals with Autism Spectrum Disorders

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ABSTRACT

Individuals with Autism Spectrum Disorders (ASD) will struggle to different degrees with social communication skills. To facilitate the learning of new social skills and to allow for repetition and practice, video modeling is being utilized in the PreK-12 setting. This chapter describes behaviors inherent to individuals with autism spectrum disorders that could benefit from the use of video modeling as an intervention, or part of an intervention, as well as a step-by-step description on how to effectively implement video modeling. Additionally, examples of data collection forms, permission forms, and other helpful resources are provided.

INTRODUCTION

According to the National Autism Center (NAC) (2009), video modeling is a research-based intervention that can be used to enhance communication, cognitive functions, personal responsibility and play/social skills, it can also decrease problem behaviors and sensory/emotional difficulties. There are several types of video modeling techniques, often times video modeling is combined with other types of strategies such as prompting and reinforcement. In order for video modeling to serve as an effective intervention, teachers, parents, and Individualized Education Program (IEP) teams must first understand the research behind the effectiveness, the types and components of video modeling, and how to create and then implement the intervention with fidelity. The purpose of this chapter is to describe the behaviors inherent in individuals with autism spectrum disorders that could benefit from the use of video modeling as an intervention or part of an intervention as well as a step by step description on how to effectively implement video modeling interventions. Additionally, examples of data collection forms, permission forms, and other helpful resources will be provided. Finally, a comprehensive list of further reading and web resources highlighting the research-base behind video modeling is included.

DOI: 10.4018/978-1-5225-0034-6.ch033

Box 1. Case study part 1: Introducing Noah

Noah is a twelve year old boy with a diagnosis of Asperger's syndrome. He is currently starting sixth grade and is in mostly general education classes with the exception of a study/social skills class in the resource room setting and a gifted math class. Since transitioning from elementary to middle school, Noah has experienced a lot of changes in his daily schedule, some of which resulted in a full meltdown at school due to his difficulty in handling unexpected changes. Last week in the cafeteria, Noah's lunch period was interrupted by a fire drill. Noah refused to leave the cafeteria with his classmates and began to pace up and down near the lunch table. When approached by a peer who asked Noah to walk outside with him, Noah became upset and yelled to "Leave me alone and let me eat my lunch!" Noah put his hands over his ears and hummed. He was approached by his math teacher who spoke softly to Noah and was able to lead him out of the cafeteria with the rest of his class. Outside, Noah continued to block his ears and hum and refused to stand with his class.

Why use Video Modeling?

Video modeling capitalizes on the strengths and preferred interests of individuals with ASD while addressing the skill deficit area. Many individuals with ASD have strengths in visual processing and a preference for visual media along with deficits in social communication/interaction.

Strengths of individuals with ASD include "visual discrimination skills, and visual spatial processing, and the capacity to focus or sustain attention for static visual information" (Tsatsanis, 2004, p. 62). Numerous studies also document relative strengths in visual processing (Fullerton, 1996; Huang & Wheeler, 2006; Quill, 2000; Rubin & Lenin, 2004). The National Autism Center (NAC) (2009) lists visual strategies as an established intervention. Learning social skills through watching videos with clearly defined action steps capitalizes on visual strengths of individuals with ASD. Visual media, such as video models, is a type of visual strategy. A well-constructed video model intervention captures and maintains the attention of individuals with ASD, allowing for more in-depth learning of new skills because of the absence of unnecessary distractions (Bellini & Akullian, 2007; Wilson, 2013).

Technology is highly reinforcing and preferred activity for many individuals with ASD (Bellini & Akullian, 2007; Sherer et al., 2001). Stumey (2003) reported that "video technology has proven useful as a tool for modeling appropriate behavior, providing feedback, and creating discriminating opportunities for the child's own behavior and as a medium for presenting basic instruction that many children find engaging (p. 168; in Goldsmith & LeBlanc, 2004). Moore, Cheng, McGrath, and Powell (2005) reported that people with ASD often have a natural affinity for technology, often thrive in the controlled environment offered by the computer, and often value the repetitive nature of some computer tasks. Moreover, Moore, McGrath, and Thorpe (2000) as cited in el Kaliouby, Picard, and Baron-Cohen (2006), reported that "many persons with ASD prefer to communicate with and through computers because they are predictable and place some control on the otherwise chaotic social world" (p. 237).

Shane et al. (2011) describe the role of technology in society as "burgeoning" while more and more professionals working with individuals with ASD and their families adopt new technologies to facilitate not only every day communication but also social and functional skills. Video technology is among the most cost-effective, readily available technology is for individuals working or living with someone with ASD (Goldsmith & LeBlanc, 2004; Huang & Wheeler, 2006; Nikopoulos, Canavan, & Nikopoulou-Smymi, 2009). Access to simple recording devices has become more widespread. Most hand-held media devices include a video function and the prices of digital cameras have become more reasonable as new technologies emerge (Shane et al., 2011).