

**Teaching Social Skills Using Video Modeling Interventions**  
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ABSTRACT

Difficulties in social skills are a distinctive characteristic of many students with special needs, even those with mild disabilities. The literature supports many approaches to teaching social skills, yet many of these interventions require 1:1 intensive training for implementation, and/or are being conducted in laboratory or clinical settings rather than in naturalistic environments. As technology is becoming a growing component of social skills intervention through the use of Smartboards, Ipads, computers, and other electronic devices, a growing popular method with equal support from the literature is the use of video modeling. Video modeling consists of a video demonstration of a desired behavior and then an imitation of the model's behavior. With the use of technology, Speech Language Pathologists (SLPs) and other educators can reduce lesson planning time and provide data collection and reporting that may improve video modeling implementation. Additionally, the use of animation in video modeling, can enhance student motivation and generalization while still utilizing the science of video modeling. With increasing class sizes and decreasing resources, technology may offer a good solution for teachers who want to improve the social skill development of multiple children in a classroom setting. The purpose of this article is to review the research on television and learning, video modeling and then provide an overview of current products that are available to provide social skills intervention using video modeling.

Social Skills Interventions in Special Education

A core deficit of several disorders (e.g. Autism Spectrum Disorders [ASD]) is difficulties with social skills, regardless of the severity of the disorder (Carter, Davis, Klin, & Volkmar, 2005). Difficulties with social skills are also often seen in students with language impairments, attention deficit hyperactivity disorder, and learning disabilities as well. Without intervention, difficulties in social skills can worsen as social situations become more complex as the child gets older and becomes more aware of their own differences (Schopler & Mesibov, 1983; Tantam, 2003).

Despite the importance of social skill development, few students in special education receive sufficient social skills interventions (Hume, Bellini, & Pratt, 2005). There is no global standard for teaching social skills in special education (or in general education). However, there are many approaches to remediating social skill deficits that have been previously used. Social skills training (SST) is a popular approach that teaches specific social skills (e.g. eye contact, initiations) using behavioral and social learning procedures (Cooper, Griffith, & Filer, 1999; McConnell, 2002). This approach has been shown to be effective with students with multiple disabilities, such as specific learning disabilities (Forness & Kavale, 1999). One of the benefits of this approach is that it can be implemented in a naturalistic environment and may result in increased social interactions with peers (Barry et al., 2003). Another approach that is now being studied is teaching social cognition or social thinking skills (Winner, 2000). This approach emphasizes teaching skills related to theory of mind and perspective taking (Crooke, Hendrix, & Rachman, 2008; Gevers, Clifford, Mager, & Boer, 2006; Ozonoff & Miller, 1995).

Other studies have shown success using a more structured teaching environment that scaffolds social interaction by breaking down teaching components into sequential steps that build upon previous steps (e.g. Howlin & Rutter, 1987; Lovaas,

1993; Ozonoff & Cathcart, 1998). Parent training programs have also resulted in success with the parent-child dyadic relationship (e.g. Aldred, Green, & Adams, 2004) but do not address peer relationships. Research demonstrates that targeting specific skills (e.g. cooperation, turn-taking) results in better outcomes than more global interventions (Quinn, Kavale, Mathur, Rutherford, & Forness, 1999). In a literature review of 55 studies targeting social skills for children with ASD, McConnell (2002) identified 5 categories of successful social skills interventions: 1) Environmental modifications (manipulating the environment to encourage social interactions with peers); 2) Child-specific interventions (direct instruction of social behaviors); 3) Collateral skills interventions (train related skills such as play or language that result in improved social interaction although not directly targeted); 4) Peer-mediated interventions (training non-disabled peers to guide social interactions with special needs students); and 5) Comprehensive interventions (combine two or more of the above approaches).

However, there are several limitations with existing social skills interventions. One concern with current social skills interventions is that minimal effectiveness has been reported (Quinn, et al., 1999), particularly with preschool aged children (Mathur, Kavale, Quinn, Forness, & Rutherford, 1998). Another concern is that most social skills interventions do not adequately plan for generalization (Hwang & Hughes, 2000) and studies that do report generalization tend to have low effects (Bellini, Peters, Benner, & Hopf, 2007). This may be due to interventions implemented in contrived environments (e.g. laboratories, clinics) rather than in the natural environment (e.g. classroom) (Gresham, Sugai, & Horner, 2001). Interventions that are conducted in more contrived environments (e.g. pullout) have been shown to produce low to questionable intervention effects and very low generalization effects compared to training in the classroom, which has been shown to result in moderate intervention and maintenance effects, yet, also with low generalization (Bellini, et al., 2007). Many interventions are not effective because they fail to match the social skills intervention strategy to the type of skill deficit presented (Gresham, et al., 2001). For example, some children may need help acquiring a new skill, while others may need help with performance and should work on practicing the skill. Intervention fidelity is not reported in most intervention studies (Schopler & Mesibov, 1983) and there is little evidence of social skills interventions that operate as intended and this lack of fidelity makes it tough to discern whether or not the intervention was ineffective because of poor implementation or because of poor intervention design (Gresham, et al., 2001). Another potential issue may be the number of hours of intervention. In a recent meta-analysis, the number of hours administered per intervention ranged from 2.5 to 28 hours over 10 to 210 days, which might have been a factor in the low intervention effects (Bellini, et al., 2007). However, the authors note that there was no significant relationship between the number of hours and the effectiveness of the intervention.

School is perhaps the ideal environment for learning social skills as it is where children have the most social opportunity. However, schools typically lack the training, resources, and time to effectively address social skill deficits (Bellini, et al., 2007). In addition, the cost to provide training for existing interventions or to pay for outside service providers to implement the intervention is not feasible for most school districts (Ganz, 2006). As of 2007, there were 6.7 million students ages 3 to 21 served by IDEA of which 1.48 million were classified as having a primary diagnosis of a speech or language impairment and 4.14 million with cognitive impairments including specific learning disabilities, autism, and mental retardation (U.S. Department of Education, 2007). This growing population is in need of low cost alternatives that are scientifically-based, provide solutions for improving teacher fidelity, and that are designed for group instruction.

## Television and Learning

The impact of television on children's learning has been a topic of heated debate over the last three decades. There has been evidence of the impact of violent cartoons on aggression in children and boys (Bjorkqvist & Lagerspetz, 1985). Huesmann et al. (1984) found that children who thought television mimicked real life were more aggressive than children who thought otherwise. Research by Bjorkqvist & Lagerspetz (1985) suggested that a key element of viewing aggression as a suitable behavior is the possible self-identification with aggressive characters. This identification is thought to aid in the development of permissive attitudes toward aggressive behaviors in social contexts.

Television also has the potential to teach pro-social behaviors to children. Recent research showed the striking result that television is no more prone to fostering violence than it is to fostering pro-social behavior (Fisch, 2005; Friedrich & Stein, 1975; Mares & Woodard, 2005; Wright et al., 2001). Forge & Phemister (1987) further suggested that watching cartoons can have the same positive effects as watching live-model pro-social programs. Among the benefits of pro-social cartoons and programs are elicitation of pro-social behaviors (Forge & Phemister, 1987), altruism (Mares & Woodard, 2005), nonverbal helping behaviors (Friedrich & Stein, 1975), and academic skills (Fisch, 2005; Tidhar, 1996; Wright, et al., 2001).

But when are cartoons most effective? Drawing from Jean Piaget's theory of cognitive development (Piaget, 1952), Bjorkqvist & Lagerspetz (1985) found that children at the preoperational stage (under seven years of age) experienced cartoons as separate and fragmental incidents rather than as a continuous story. Mares & Woodard (2005) supported this finding by performing a meta-analysis; they found that the effects of pro-social content increased between the ages of three to seven years, peaked at age seven, and declined by age 12. Based on these results, it is hypothesized that programs such as *Sesame Street*, *Mister Rogers' Neighborhood*, and *Barney and Friends* do not show significant positive effects because they are aimed at preschool audiences. Children in this age group experience cartoons and other pro-social programs in a fragmented way or may lack the cognitive ability to grasp the content of the story (Mares & Woodard, 2005).

Mares and Woodard (2005) examined the effects of context, gender, ethnicity, and socioeconomic status on the relationship between behavior and pro-social exposure. Results suggested that audiences from middle- to upper class settings were the most affected by pro-social programs (Mares & Woodard, 2005). These results suggest that the context in which pro-social behavior is presented might have an effect on the audience's learning, in that learning might be lessened if the context differs greatly from the context of the viewers. The more obvious the connection between the situation shown and the viewer's situation, the more likely it is that the viewers will use the modeled behavior (Mares & Woodard, 2005). Characteristics of effective programs include ensuring that topics and language are developmentally appropriate, making educational content central rather than tangential, conveying a small number of ideas per episode, drawing explicit connections between episodes, using action-filled visuals, focusing on characters who are seen as competent and intelligent and with whom audiences can identify, and motivating children to carry their learning forward in other activities (Fisch, 2005).

To make animated shows as powerful and effective as possible, Fisch (2005) recommends the following: 1) Engage children using humor, mysteries, games, and other motivating components; 2) Choose age-appropriate topics that are inherently interesting and relevant to children's lives; 3) Present content using age-appropriate language with varying levels of difficulty; 4) Present educational material in a clear,

direct, and explicit manner; 5) Keep the educational content "on the plotline" (i.e. making it central to the narrative story); 6) Focus on a small number of teaching points; 7) Reinforce educational concepts by repeating them throughout the episode or across multiple episodes; 8) Draw connections among conceptually related segments to help children see how skills can be applied in different situations; 9) Use engaging visuals rather than just "talking heads" - include characters with whom children can identify; 10) Encourage viewer participation - have children actively engage in each episode's educational content; and 11) Provide extension activities to help children carry their learning into real world activities.

Previous research on the impact of cartoons on children's learning has focused on negative aspects, highlighting aggressive behaviors and violence. However, a string of research has focused on the pro-social qualities of cartoons, particularly teaching social skills to children, and cartoons' effectiveness in this realm is gaining respect among consumers and researchers. In order for a cartoon to effectively teach social skills, many factors need to be taken into consideration, including careful details on its target population, the population's developmental stage(s), and the manner and context in which the targeted social behavior is presented.

### Video Modeling

Bandura's view of learning (1977) emphasized that children learn by observing a model or receiving instructions without actually experiencing the behavior themselves. Subsequently, modeling has become a natural way of discriminating between positive and negative consequences, and for teaching children an array of skills such as verbal, motor, social, and academic skills (Corbett & Abdullah, 2005; Hitchcock, Dowrick, & Prater, 2003). This intervention later became supported by Skinner's (1953) operant behavior theory, Vygotsky's (1978) theory of zone of proximal development, and later by Dowrick's (1999) view of self-modeling. With increases in the usage of technology, modeling quickly became adopted by video and became a promising intervention to facilitate learning for children of all ages and abilities. Video modeling has been found in over 200 applications as an intervention over the past three decades (Hitchcock, et al., 2003).

Currently, video modeling is used with school age children of all abilities to increase academic and behavioral skills (Hitchcock, et al., 2003; Woltersdorf, 1992), although it has also been used outside of the classroom. More recently, Boyer, Miltenber, Batsche, & Fogel (2009) explored using video modeling to enhance gymnastic skills of girls 7-10 years old. Additionally Kraus, Smith, & Ratner (1994) used video modeling to modify alcohol prevention programs with children in second through fourth grades.

Social learning theory (Bandura, 1977) and the unique components of video modeling, have allowed this procedure to thrive as an effective intervention in special education. Video modeling has been successfully used to teach functional skills to students with moderate or severe cognitive disabilities as well as students with low incidence motor disabilities (Bellini, et al., 2007; Hitchcock, et al., 2003). Several studies have demonstrated success of video modeling for children with ASD (e.g. Charlop-Christy & Daneshvar, 2003). Some key characteristics of ASD that permit favorably the use of video modeling are over selective attention, restrictive field of focus, preference for visual stimuli, and visually cued instruction, avoidance of face-to-face interaction, and ability to process visual information more readily than verbal communication (Corbett & Abdullah, 2005). In addition, social learning theory is based on the importance of attention and motivation, making video modeling an effective strategy since it improves

the attention of children with ASD by focusing their attention to relevant stimuli while it serves as an inherently motivator by reinforcing children (Corbett & Abdullah, 2005).

Video modeling appears to be beneficial for teaching a variety of skills to students with ASD, including communication (Charlop & Walsh, 1986), social skills (D'Ateno, Mangiapanello, & Taylor, 2003), emotion processing (Corbett, 2003), and academic skills ((Kinney, Vedora, & Stromer, 2003). Positive results also apply to generalization and maintenance of behaviors (Bellini & Akullian, 2007). Particularly in teaching attention and motivation skills, researchers attributed positive gains to the fact that students with ASD attended more to video models than live models, reducing the level of anxiety and distress related to some social interaction (Charlop-Christy & Daneshvar, 2003). Furthermore, video modeling can present the target behavior in a more realistic environment, where the child is intended to perform the targeted behavior.

Video modeling is most effective when done utilizing best practices from the literature. For example, receptivity of the observer can be enhanced by employing models that are similar to the child (Kazdin, 1974). Also, researchers can use multiple models to teach a skill or behavior (Charlop & Milstein, 1989), have the target behavior of the model rewarded (Strayhorn, 1988), and have the ability to present an array of environments to ensure maintenance and generalization (Thelen, Fry, Fethenbach, & Frautsch, 1979). Furthermore, video modeling can be used with behaviors that have been resistant to other interventions (Hitchcock, et al., 2003). To minimize rote responses with no spontaneity or flexibility in social situations, the use of models that portray socio-emotional skills in multiple situations and environments is recommended (Corbett, 2003). In order for video modeling to be a successful intervention, Nikopoulus & Keenan (2006) suggest using preferably one model, reducing the targeted behavior to 30-40 seconds, and the first setting used should be goal setting where the target behavior is expected.

### Video Modeling Programs

Although many service providers and parents choose to make their own videos, there are a variety of programs available (and many that are evidence-based) that can reduce preparation time and that teach common social skills (see sample of available programs below). Most of these programs provide video models using typically developing children demonstrating the desired social behaviors. Some programs go beyond just producing videos and offer lesson plans to facilitate social interaction and generalization. One program uses computers to present video models and ask students questions about the videos to assess comprehension of the social scenarios (*Social Skills Builder*). The advantage of this approach is that data is automatically collected and students can work independently and at their own pace. Another program aims to increase student motivation by using comic book superheroes in conjunction with the videos of children (*Superheroes Social Skills*). Almost all of these programs use videos of children to teach social skills. The limitation of this approach is that videos of children may not be engaging enough for some students and the models may not demonstrate the social behaviors in a manner that the students watching the video can understand. Many of the programs are designed for teaching students in 1:1 or small group instruction, there are few programs available for classroom group instruction. Another limitation of many video modeling programs is that the children in the videos are unknown to the students watching and there is no opportunity to form an emotional connection or to know the characters over time.

One program, *TeachTown: Social Skills*, uses animated characters (video models) in common social stories. The use of professional animation, music, and voice acting engages children and the use of the program over time results in students forming

an emotional bond with the characters so that instead of watching a video of unknown children in isolation, they are watching their favorite characters in a variety of situations and learning from them. The program also includes lesson plans, data collection, and generalization strategies and is designed to be used for group instruction so that peers can learn and practice social skills together.



<p>Model Me Kids www.modelmekids.com</p>	<p>Videos demonstrate social skills by modeling peer behavior at school, on a play-date, at a birthday party, on the playground, at a library, at the dentist, restaurant, and more. Real children model and narrate each skill. DVDs for ages 2-17</p>
<p>Social Skill Builder www.socialskillbuilder.com</p>	<p>Series of software programs that use interactive videos to teach key social thinking, language and behavior. The software helps kids learn and continue to build the skills of problem solving, friendship, life skills, critical thinking, emotions, and consequences.</p>
<p>Superheroes Social Skills www.pacificnwpublish.com</p>	<p>Video modeling and comic book program for teaching a variety of social skills. Includes lesson plans for working on social skills in the school, home, and community. Teaches following directions, reducing anxiety, imitation, joint attention, and other skills.</p>
<p>TeachTown Social Skills www.teachtown.com</p>	<p>Social skills curriculum composed of video modeling, social stories, and pro-social animation that uses engaging animated characters to teach rule following, friendship, conversation, self-management, social language, and other social skills. Includes daily lesson plans for teachers to scaffold skills and facilitate generalization.</p>
<p>Watch Me Learn www.watchmelearn.com</p>	<p>Video modeling series that addresses social interaction, attention skills, play, building language (especially labeling), understanding gestures and developing imitation skills.</p>

In summary, there is clear evidence of positive outcomes for the use of video modeling for children with special needs, and there are even greater benefits for children in special education, particularly with ASD (Corbett & Abdullah, 2005; Hitchcock, et al., 2003). Video modeling is linked to an increase in frequency of desired behaviors, academic skills, and motivation (Corbett & Abdullah, 2005). Highest intervention effects of video modeling were found for functional skills, followed by social-communication, and behavioral functioning (Bellini & Akullian, 2007). Lastly, generalization and maintenance of skills over time have also been a positive effect of this intervention (Bellini & Akullian, 2007). Video modeling is a positive and promising strategy for teaching children of all abilities.

CE QUESTIONS:

- 1) Which types of students need social skills interventions?
  - a) Students with ASD
  - b) Students with cognitive impairment
  - c) Students with learning disabilities
  - d) Students with language delays
  - e) All of the above\*
  
- 2) Which of the following is an important feature of television that makes children imitate aggressive behaviors?
  - a) Identification with the characters\*
  - b) Severity of the aggression
  - c) Age of the aggressor
  - d) Age of the victim
  - e) Language ability of the viewer
  
- 3) Which of the following has NOT been shown in the research to be an effective technique in video modeling?
  - a) employing models that are similar to the child
  - b) showing the desired behavior in slow motion\*
  - c) using multiple models to teach
  - d) having the target behavior of the model rewarded
  - e) use of models in multiple situations
  
- 4) Which of the following characteristics of ASD is not described as an indicator for video modeling as a good intervention tool?
  - a) over-selective attention
  - b) preference for visual stimuli
  - c) restricted interests\*
  - d) avoidance of face-to-face interaction
  - e) restrictive field of focus
  
- 5) Which of the following social skills technologies does NOT use child actors as models?
  - a) Superheroes Social Skills
  - b) TeachTown: Social Skills\*
  - c) Social Skill Builder
  - d) Model Me Kids
  - e) ALL of these interventions use child actors as models

## References

- Aldred, C., Green, J., & Adams, C. (2004). A new social communication intervention for children with autism: Pilot randomized controlled treatment study suggesting effectiveness. *Journal of Child Psychology and Psychiatry*, 45(8), 1420-1430.
- Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bellini, S., & Akullian, J. (2007). A meta-analysis of video modeling and video self-modeling interventions for children and adolescents with Autism Spectrum Disorders. *Exceptional Children*, 73(3), 264-287.
- Bellini, S., Peters, J. K., Benner, L., & Hopf, A. (2007). A Meta-Analysis of School-Based Social Skills Interventions for Children With Autism Spectrum Disorders. 28(3), 153-162.
- Bjorkqvist, K., & Lagerspetz, K. (1985). Children's Experience of Three Types of Cartoon at Two Age Levels. *International Journal of Psychology*, 20, 77-93.
- Boyer, E., Miltenberger, R. G., Batsche, C., & Fogel, V. (2009). Video modeling by experts with video feedback to enhance gymnastics skills. *Journal of Applied Behavior Analysis*, 42(4), 855-860.
- Carter, A. S., Davis, N. O., Klin, A., & Volkmar, F. R. (2005). Social development in autism. In F. R. Volkmar, R. Paul, A. Klin & D. Cohen (Eds.), *Handbook of Autism and Pervasive Developmental Disorders* (Vol. 1 Diagnosis, Development, Neurobiology, and Behavior). Hoboken, NJ: John Wiley and Sons.
- Charlop-Christy, M. H., & Daneshvar, S. (2003). Using video modeling to teach perspective taking to children with autism. *Journal of Applied Behavior Analysis*.
- Charlop, M. H., & Milstein, J. P. (1989). Teaching autistic children conversational speech using video modeling. *Journal of Applied Behavior Analysis*, 22, 275-285.
- Charlop, M. H., & Walsh, M. E. (1986). Increasing Autistic Children's Spontaneous Verbalizations of Affection: An Assessment of Time Delay and Peer Modeling Procedures. *Journal of Applied Behavior Analysis*, 19, 307-314.
- Cooper, M. J., Griffith, K. G., & Filer, J. (1999). School intervention for inclusion of students with and without disabilities. *Focus on Autism and Other Developmental Disabilities*, 14, 110-115.
- Corbett, B. A. (2003). Video Modeling: A window into the world of autism. *The Behavior Analyst Today*, 4(3), 367-377.
- Corbett, B. A., & Abdullah, M. (2005). Video Modeling; Why does it work for children with autism? *Journal of Early and Intensive Behavior Intervention*, 2(1).
- Crooke, P., Hendriz, R. E., & Rachman, J. Y. (2008). Brief Report: Measuring the Effectiveness of Teaching Social Thinking to Children with Asperger Syndrome (AS) and High Functioning Autism (HFA). *Journal of Autism and Developmental Disorders*, 38(3), 581-591.
- D'Ateno, P., Mangiapanello, K., & Taylor, B. A. (2003). Teaching complex play sequences to a preschooler with autism using video modeling. *Journal of Positive Behavior Interventions*, Winter.
- Dowrick, P. W. (1999). A Review of Self Modeling and Related Interventions. *Applied and Preventive Psychology*, 8, 23-39.
- Fisch, S. (2005). Children's learning from television. *Television*, 18, 10-14.
- Forge, K. L., & Phemister, S. (1987). Effect of Prosocial Cartoons on Preschool Children. *Child Study Journal*, 17, 83-87.
- Forness, S., & Kavale, K. (1999). Teaching social skills in children with learning disabilities: A meta-analysis of the research. *Learning Disability Quarterly*, 19, 2-13.



- Friedrich, L. K., & Stein, A. H. (1975). Prosocial Television and Young Children: The Effects of Verbal Labeling and Role Playing on Learning and Behavior. *Child Development, 46*(1), 27-38.
- Ganz, M. L. (2006). The Cost of Autism. In S. O. Moldin & J. L. R. Rubenstein (Eds.), *Understanding Autism: From Basic Neuroscience to Treatment* (pp. 475-502). New York, NY: CRC Taylor and Francis.
- Gevers, C., Clifford, P., Mager, M., & Boer, F. (2006). Brief Report: A theory-of-mind social cognition training program for schoolaged children with pervasive developmental disorders: An open study of its effectiveness. *Journal of Autism and Developmental Disorders, 36*(4), 567-571.
- Gresham, F. M., Sugai, G., & Horner, R. H. (2001). Interpreting outcomes of social skills training for students with high-incidence disabilities. *Teaching Exceptional Children, 67*, 331-344.
- Hitchcock, C. H., Dowrick, P. W., & Prater, M. A. (2003). Video Self-Modeling Intervention in School-Based Settings: A Review. *Remedial and Special Education, 24*.
- Howlin, P., & Rutter, M. (1987). *Treatment of Autistic Children*. Chichester: Wiley.
- Huesmann, L. R., Lagerspetz, K., & Eron, L. D. (1984). Intervening Variables in the Television Violence-Aggression Relation: Evidence from two Countries. *Developmental Psychology, 20*, 746-775.
- Hume, K., Bellini, S., & Pratt, C. (2005). The usage and perceived outcome of early intervention and early childhood programs for young children with autism spectrum disorders. *Topics in Early Childhood Special Education, 25*, 195-207.
- Hwang, B., & Hughes, C. (2000). The effects of social interactive training on early social communicative skills of children with autism. *Journal of Autism and Developmental Disorders, 30*, 331-343.
- Kazdin, A. E. (1974). Covert modeling, model similarity, and reduction of avoidance behavior. *Behavior Therapy, 5*, 325-340.
- Kinney, E. M., Vedora, J., & Stromer, R. (2003). Computer-Presented Video Models to Teach Generative Spelling to a Child with an Autism Spectrum Disorder. *Journal of Positive Behavior Interventions, 5*, 22-29.
- Kraus, D., Smith, G. T., & Ratner, H. H. (1994). Modifying Alcohol-Related Expectancies in Grade School Children. *Journal of Study of Alcohol, 55*(5), 535-542.
- Lovaas, O. I. (1993). The development of a treatment-research project for developmentally disabled and autistic children. *Journal of Applied Behavior Analysis, 26*, 617-630.
- Mares, M., & Woodard, E. (2005). Positive Effects of Television on Children's Social Interactions: A Meta-Analysis. *Media Psychology, 7*(3), 301-322.
- Mathur, S. R., Kavale, K. A., Quinn, M. M., Forness, S. R., & Rutherford, R. B. (1998). Social skills interventions with students with emotional and behavioral problems: A quantitative synthesis of single subject research. *Behavioral Disorders, 23*, 193-201.
- McConnell, S. R. (2002). Interventions to facilitate social interaction for young children with autism: Review of available research and recommendations for educational intervention and future research. *Journal of Autism and Developmental Disorders, 32*, 351-373.
- Nikopoulos, C., & Keenan, M. (2006). *Video Modeling and Behavior Analysis: A guide for Teaching Social Skills to Children with Autism*. Philadelphia, PA: Jessica Kingsley Publishers.

- Ozonoff, S., & Cathcart, K. (1998). Effectiveness of a home program intervention for young children with autism. *Journal of Autism and Developmental Disorders*, 28, 25-32.
- Ozonoff, S., & Miller, J. N. (1995). Teaching theory of mind: A new approach to social skills training for individuals with autism. *Journal of Autism and Developmental Disorders*, 23, 415-433.
- Piaget, J. (1952). *The Origins of Intelligence in Children*. London: Routledge and Kegan Paul.
- Quinn, M. M., Kavale, K. A., Mathur, S. R., Rutherford, R. B., & Forness, S. R. (1999). A meta-analysis of social skill interventions for students with emotional or behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 7(1), 54-64.
- Schopler, E., & Mesibov, G. (1983). *Autism in Adolescents and Adults*. New York, NY: Plenum Press.
- Skinner, B. F. (1953). *Science and Human Behavior*. New York, NY: Macmillan.
- Strayhorn, J. M. (1988). *The competent child: An approach to psychotherapy and preventative mental health*. New York, NY: Guilford Press.
- Tantam, D. (2003). The challenge of adolescents and adults with Asperger syndrome. *Child Adolescent Psychiatry Clinics of North America*, 12, 143-163.
- Thelen, M. H., Fry, R. A., Fethenbach, P. A., & Frautsch, N. M. (1979). Therapeutic videotape and film modeling: A review. *Psychological Bulletin*, 86, 701-720.
- Tidhar, C. (1996). Enhancing Television Literacy Skills Among Preschool Children Through an Intervention Program in the Kindergarten. *Learning, Media and Technology*, 22(2), 97-110.
- U.S. Department of Education. (2007). Children with Disabilities Receiving Special Education Under Part B of the Individuals with Disabilities Education Act. In P. B. Table 1-7 Children and students served under IDEA, in the U.S. and outlying areas, by age and disability category: Fall 2006 (Ed.), *U.S. Department of Education, Office of Special Education Programs*.
- Vygotsky, L. S. (1978). *Mind in Society*. Cambridge, MA: Harvard University Press.
- Winner, M. G. (2000). *Inside out: What makes a person with social cognitive deficits tick?* San Jose, CA: Think Social Publishing.
- Woltersdorf, M. (1992). Videotape Self-Modeling in the Treatment of Attention-Deficit Hyperactivity Disorder. *Child & Family Behavior Therapy*, 14(2), 53-73.
- Wright, J., Huston, A., Murphy, K., Peters, M., Piñon, M., Scantlin, R., & Kotler, J. (2001). The relations of early television viewing to school readiness and vocabulary of children from low-income families: The early window project. *Child Development*, 72(5), 1347-1366.