

Play Time: An Examination Of Play Intervention Strategies for Children with Autism Spectrum Disorders

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There is no question that play is an integral part of child development. Through play, children learn social skills such as sharing, cooperation and turn-taking. Social language is learned, self-esteem is built, and friendships are formed during recreational activities with peers. Play encourages cognitive enrichment, emotional growth, and influences personality development. It offers a means of exploring various societal roles and rules, and provides time to practice finding solutions to problems. Creativity and imagination are fostered through play. For typically developing children, engaging in pleasurable, imaginative and socially interactive activity is a natural part of life. In contrast, many children with autism spectrum disorders do not play in a manner that is beneficial to development. Skill deficits and interfering problem behaviors often inhibit productive play in children with autism spectrum disorders; consequently, this crucial aspect of development should be a target for early intervention. Pamela Wolfberg's Integrated Play Groups (IPG) and Stanley Greenspan's Floor Time are two intervention strategies that are intended to increase developmentally beneficial play in children with autism spectrum disorders. This article will discuss IPG and Floor Time, and will examine research that has investigated the efficacy of these models.

Play Characteristics of Children with Autism Spectrum Disorders

Wolfberg (1995) defines play as an activity that is pleasurable, intrinsically motivated, flexible, non-literal, voluntary, and involves active engagement. In contrast, children with autism spectrum disorders often engage in inflexible, repetitive play patterns and may not exhibit symbolic or pretend behavior. Individuals with this disorder tend to view the world as concrete and literal; consequently, they may have difficulty with abstract concepts and imaginative behavior. Children with autism spectrum disorders may also display deficits in sequencing and motor planning. As a result of these deficits, they may not develop play scripts or understand the scripts of other children. Play in children with autism spectrum disorders is often solitary. Several factors contribute to the lack of social play. First, individuals with autism have communication deficits. They may not understand the language or social cues of peers, or have the ability to express their feelings effectively with others. Second, children with autism spectrum disorders may not understand that others have their own unique thoughts and feelings. This lack of understanding limits reciprocity in relationships. Third, it is common for individuals with this disability to have restricted and unusual interests, so they may be resistant to explore new play themes with others. Finally, peers may exclude children with autism spectrum disorders or may not understand how to effectively engage them in play. In summary, factors inhibiting social play in children with autism spectrum disorders include the following: communication deficits; difficulty understanding the feelings of others; restricted and unusual interests; and peer exclusion.

The Integrated Play Group Model

The Integrated Play Group Model, which is based on Vygotsky's social constructivist theory, aims to improve the social and symbolic play skills of children with autism spectrum disorders ages 3 to 11. In addition to addressing skill deficits, the IPG model also emphasizes developing the intrinsic desire to play. According to Wolfberg and Schuler (1993), in the IPG model, "Play development is fostered by physically arranging the environment to bring about the most competent forms of play, and by guiding participation within these environments while capitalizing upon child initiations." It is important to differentiate between social skills training which involves direct skill instruction, and IPG which provides a support system for a child's initiations.

Integrated play groups contain guides, expert players, and novice players. Guides are adults who have training in

IPG and experience working with individuals with autism spectrum disorders. The play group guides use various methods of assessment to determine how to best coordinate play activities to maximize the social and cognitive development of the participants. The expert players are socially competent peers, and the novice players include children with autism spectrum disorders at any level of functioning. The groups are comprised of three to five children with a higher ratio of expert to novice players. The IPG model is based on the concept of guided participation. The guide adjusts the amount of support given during the play group sessions according to the needs of the children, and builds on the interests and abilities of the group members. Initially, the guide directs the play activity. As the children become more capable of creating play themes, initiating interactions and setting up play events, the guide fades support until no direct guidance is provided. Transitions are often challenging for children with autism. Consistency in schedule and routine are important components of the IPG model because they help participants anticipate future events. The same groups meet regularly in natural settings, two to three times a week for 30-60 minutes. Opening and closing rituals are utilized and visual cues provide additional support. Materials such as constructive and sociodramatic toys are selected to encourage interaction and imaginative play.

Wolfberg and Schuler (1993) examined the efficacy of the IPG model. The researchers were interested in determining if the model would increase the functional and symbolic use of objects and social play of individuals with autism. In addition, they investigated whether qualitative improvements in play skills would generalize to different settings. The researchers conducted three play groups in a public school setting for 30 minutes two times a week for four months. Each group contained two novice players and three expert players. Data were collected on three of the novice players with autism. The results indicated that all participants with autism engaged in a greater percentage of functional and symbolic toy use and social play after the IPG intervention. Parent and teacher interviews revealed that qualitative play improvements were evident in a variety of settings. This research is promising; however, the results are somewhat limited by the small sample size and lack of a control group. More research should be conducted on the IPG model.

The Floor Time Model

Greenspan's Floor Time offers another play intervention for preschool age children with autism spectrum disorders. The Floor Time model focuses on developing relationships and affect. Interventions are designed according to the child's developmental level and individual characteristics. Greenspan explains that although affective engagement such as showing pleasure, sharing emotions, and reciprocating interactions is secondary to the primary symptoms of autism (e.g., cognitive deficits), affect and relationships are more amenable to intervention. Greenspan believes that through affective interaction, children with autism will concurrently experience cognitive and emotional growth.

Floor Time is child directed and adult supported. It provides an opportunity to transform perseverative play into more meaningful and developmentally beneficial behavior, and works to expand the play themes of children with autism spectrum disorders. At the same time, it is designed to help the child develop relationships with others. Floor Time involves five steps:

1. The adult observes the child playing in order to determine how to approach him/her.
2. The adult approaches the child and joins the activity while trying to match the child's emotional tone.
3. The child directs the action and the adult follows the child's lead.
4. The adult expands on the child's chosen play theme without being intrusive.
5. When a child builds on the adult's input, the child "closes the circle of communication" and starts a new circle.

It is crucial that the adult does not use Floor Time as a time to teach a particular skill. It is also important to remember that the child is the leader of the activity.

Floor Time can be used to change perseverative behavior. For example, if a child is fixated on lining up blocks, the adult joins in and adds blocks to the child's line. Then the adult may place a block perpendicular and start the line

going in a different direction. When the child continues the new line, he/she has “closed the circle of communication.” Some suggestions for Floor Time include inserting obstacles into play and helping the child problem-solve. If a child has very limited play themes, it may be helpful to use sensory toys (e.g., sand tables, shaving cream, bubbles) or use popular characters that the child enjoys to gain attention.

Greenspan and Wieder reviewed the charts of 200 children diagnosed with autism spectrum disorders, and found that most children who received Floor Time intervention for at least two years made significant improvement in all areas of development. All children in the study received two to five hours of Floor Time interaction at home in addition to comprehensive services such as speech therapy, occupational therapy, and special or general education services. The researchers claimed that 58% of the participants made “good to outstanding” progress, which they defined as making significant improvements in affect, social behavior, cognitive skills, symbolic play, and creative behavior. In addition, the “good to outstanding” children no longer engaged in avoidant, self-stimulatory, or perseverative behavior. According to the authors, all of the children in the “good to outstanding” group were no longer considered autistic according to the Childhood Autism Rating Scale (CARS); however, these findings need to be replicated by other researchers not involved in the development of Floor Time. Twenty-five percent of the children were defined as having made “medium” progress. These children made affective improvements and gains in gestural communication, but they still evidenced significant delays in symbolic language and play. The “medium” group no longer engaged in self-stimulatory, avoidant, perseverative behavior. The researchers reported that 17% of the children were considered to have “ongoing difficulties.” These children made little or no improvement in affect, symbolic ability, attention, or avoidant behavior. The researchers added that most children in the “ongoing difficulty” group presented more extreme autistic symptomology when first evaluated.

The results of the chart analysis are impressive, but should be interpreted with caution. Due to sample limitations, the results only apply to the children used in the study. More research needs to be conducted with a larger and more diverse population, and by researchers other than the creators of Floor Time. In addition, a controlled scientific study would provide more definitive information on the efficacy of Floor Time intervention. However, the results of the chart review indicate that some children with autism are capable of symbolic thought, and they can make significant improvements in social relationships and affect.

Play is a voluntary activity and is differentiated from social skills training in which specific skills are systematically taught. In the IPG and Floor Time models, skills are learned indirectly through guidance and interactions with others. Both the IPG model and Floor Time are based on child initiations that are supported by adults.

The IPG and Floor Time models have strengths and weaknesses. The primary advantage of both models is that they allow children with autism spectrum disorders the opportunity to explore relationships with others on their own terms without the imposition of adult demands. One disadvantage of the IPG model is that it requires regular participation from at least two typically developing peers, an appropriate setting, and trained guides to facilitate the group. This may be difficult to organize without the cooperation of a school or community group. Some disadvantages of the Floor Time model are that it does not address social interaction with peers, and there is little information on generalization of skills to other situations and settings. More research on the efficacy of IPG and Floor Time needs to be conducted by individuals who have not been involved in the development of the models. Although a few limitations exist, both intervention strategies have merit and deserve further investigation. As with any intervention, individual differences and desired outcomes need to be considered when deciding what method to use and progress needs to be regularly evaluated.

Summary

Through play, children learn a variety of skills that are fundamental to development. Many children with autism spectrum disorders have skill deficits and interfering problem behaviors that hinder developmentally beneficial play.

Integrated Play Groups and Floor Time are two early intervention strategies that aim to improve qualitative play skills in young children with autism spectrum disorders. In both models, direct instruction is not provided; rather, adults provide support to child initiated interactions. The research available supports the effectiveness of the IPG and Floor Time models; however, inadequate samples and other methodological issues limit the utility of the studies. Early intervention efforts typically focus on the development of communication skills, social skills training, and the reduction of problem behaviors through direct instruction. Often a child with an autism spectrum disorder has a day filled with constant demands from adults, which when compared to the expectations placed on typically developing children, seems unnatural and developmentally inappropriate. It is proposed that skill deficits addressed through child directed and adult supported play become a standard component of early intervention practice.

Suggested Readings and Websites

Greenspan, S. I., & Weider, S. (1998). *The Child with Special Needs: Encouraging Intellectual and Emotional Growth*. Reading, MA: Addison-Wesley.

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