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Facilitating Play Amongst Siblings when One is Diagnosed with ASD: Guide

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Facilitating Play Amongst Siblings when one is Diagnosed with ASD: Guide

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INTRODUCTION

Quality interpersonal relationships are important and needed in human life. The sibling relationship is an important bond to maintain within a family dynamic because it is a lifelong relationship (Sage & Jegatheesan, 2010). Siblings are not only family members. This unique relationship also consists of the siblings being peers, companions and constantly present throughout each other’s lives (Sage & Jegatheesan, 2010). Many individuals diagnosed with Autism Spectrum Disorder (ASD) have difficulty forming and maintaining relationships (Travis & Sigman, 1998). 1 in 88 children are diagnosed with ASD, and may have difficulties in social interaction including: communication, reciprocal interaction, self-awareness and awareness of others (Holt & Yuill, 2014). The inability for a child to be aware of how his/her actions affect others. Being able to read and understand what others are feeling, thinking, or expressing will impact successful social interaction (Holt & Yuil, 2014). An effective way for children with ASD to develop appropriate skills needed for social interaction can be through interactions with a normal functioning sibling during play. “When children engage in play they are engaging in meaningful occupation and developing skills as a lifelong player” (Rigby & Rodger, 2006). Engaging in play as an occupation helps children develop the skills of doing, being, and becoming; doing is the development of skills, being is the expression of who they are, and becoming is engaging in interactions that are meaningful to them (Mandich and Rodger, 2006; Stagnitti, 2010). Emphasizing play as an occupation can improve the relationship and increase interaction between siblings when one child is diagnosed with ASD. Assisting and guiding parents to facilitate play with appropriate play skills between their children will increase the positive play interactions between the siblings as well as skills that can be used in future relationships.
Parents with more than one child know that each child brings happiness into the family but also, each new child brings the challenge of forming a positive sibling relationship (Klein, 2012). Children are often unable to immediately recognize the long-term bond and love that can be a part of the sibling relationship (Klein, 2012). While all children are different, a study explained that most children begin to exert their negative behaviors and emotions on their mothers upon the arrival of a new brother or sister (Edwards, Hadfield, Lucey & Mauther, 2011). This is due to a rival for love and attention created upon the birth of a younger sibling (Edwards, Hadfield, Lucey & Mauther, 2011). By showing love, affection, and interest in their newborn sibling, older sibling can begin the formation of the sibling bond (Edwards et al., 2011). Older siblings often take on an informal caretaker and educator role towards their younger siblings, including teaching or modeling to a younger sibling to educate on socially appropriate behaviors (Sage & Jegatheesan, 2010). A younger sibling tends to attach to their elder sibling as being a consistent and reliable source of comfort and security (Edwards et al., 2011). Growing up with a sibling can be a gift for children. Learning to negotiate with a sibling helps build necessary skills for the ability to build future relationships (Klein, 2012). Balancing privileges and obligations within the relationship develops integrity and responsibility in the children (Klein, 2012).

Many factors may affect the bond or interactions within the sibling relationship including age differences, gender, environment, disability, socioeconomic status, and state of health (Sage & Jegatheesan, 2010). All siblings experience moments in the relationship dynamic of negativity, frustration, and sibling rivalry (Edwards et al., 2011). The difficulties that commonly arise throughout the relationship seem to develop further capacities to experience themselves as separate, active and effective individuals (Edwards et al., 2011). Parents who are able to
recognize the uniqueness and patterns of each of their children, as well as assist in developing strengths in each individual child, helps to increase a positive relationship between the siblings (Klein, 2012). When each sibling feels pride and acceptance in their strengths, the ability for positive sibling encounters increases (Klein, 2012). Children who are openly praised for their accomplishments, in turn, can accept the accomplishments of the other sibling; increasing the ability of a positive sibling bond to be formed at a young age (Klein, 2012). The focus on the sibling relationship is important because it is lifelong and the most enduring relationship of human ties (Donley & Linkins, 2010). Increasing positive interaction and maintaining the sibling relationship is important due to the wide variety of skills that can be learned between sibling interactions.

“The sibling relationship has a distinctive emotional, passionate, painful, and solacing power which shapes the story of who we are and who we become- siblings are not minor actors on the stage of human development” (Bank and Kahn, 1997). Research has shown that sibling relationships have been effective in identifying how to successfully manage close personal relationships developed in the future (Donley & Likins, 2010). Parents reported that independence increased in their children due to having a sibling present (Edwards et al., 2011). Also, the interactions between the siblings, with one having no adult power over the other, seemed to develop rapid cognitive growth in both siblings (Edwards et al., 2011). The sibling relationship identifies predictors of a higher self-esteem in the children when the relationship is perceived as warm and functional (Donley & Likins, 2010). Through the occupation of play, children can teach their brother or sister appropriate skills to be functional in future relationships (Sage & Jegatheesan, 2010).
“The act of play extends far beyond the recreational factor” (Preissler, 2006). According to the sociocultural theory of play as socialization, through play with other children, children learn social norms and rules (Stagnitti, 2004). Children also learn to engage in social roles during play (Stagnitti, 2004). The occupation of play involves a variety of complex skills from the child such as: decision making, taking turns, problem solving, emotional regulation, language, social competence, communication, symbolic use of objects, monitoring, and reciprocity (Preissler, 2006; Stagnitti, O’Connor & Sheppard, 2012; Watts, Stagnitti,& Brown, 2014). Play also becomes a foundation for acquiring and practicing skills such as sharing, and coordination of visual interaction between two individuals (Preissler, 2006).

Engaging in play appropriate to a child's age is needed to enable children to fully develop personality, talent, and mental and physical abilities (United Nations Human Rights, 2006; Tsai, 2013). Play is vital to child development and contributes to the physical, cognitive, emotional, and social well-being of children (Ginsberg, 2007; Tsai, 2013). “Play naturally provides children the ways to express their experiences and feelings and to establish relationships with others” (Landreth, 2002; Tsai, 2013). Peer play in early childhood is the primary context for developing social norms and effective language for communication (Kenney, 2012). The type of play children engage in provides an understanding of how they view the world around them (Christensen et al., 2010). When children interact in an activity that he/she considers play, it improves the emotional wellbeing and happiness of the child (Howard & McInnes, 2013). Play is an important aspect in developing peer relationships; specifically those between siblings. Children with disabilities may be unable to accurately or consistently develop complex play skills limiting current or future ability to interact and communicate with others (Christensen et al., 2010).
Autism spectrum disorders (ASDs) are a group of neurodevelopmental disorders, with an unknown etiology, characterized by impairments in communication and social skills and typically demonstrate repetitive and stereotypical behaviors, interests, and activities (Srinivasan, Pescatello, & Bhat, 2014; Kuhaneck & Watling, 2010; Kuhaneck & Britner, 2013). Children with an ASD have marked impairments in the following social communication behaviors: reduced eye contact, failure to develop peer relationships, verbal and nonverbal communication delays, impairment in ability to sustain conversation, repetitive or stereotyped use of language, and lack of imitative play (Srinivasan et al., 2014; Kuhaneck & Watling, 2010). Repetitive and stereotypical behaviors in children with an ASD may include adherence to routines and rituals, motor mannerisms, such as hand flapping or body rocking, abnormal in intensity or focus, and preoccupation with parts of objects (Srinivasan et al., 2014, p. 874; Kuhaneck & Watling, 2010). Individuals with an ASD also have sensory impairments related to tactile, auditory, visual, and vestibular inputs, ranging from hyperresponsiveness or hyposponsiveness (Srinivasan et al., 2014). In addition, according to Srinivasan, Pescatello, and Bhat (2014), children with ASDs may have a range of impairments in cognitive and behavioral areas (p. 5). Cognitive and behavioral impairments may include attention problems, intellectual delays, anxiety, depression, aggression, temper tantrums, and self-injurious behaviors leading to isolating from the unpredictable elements of society, such as people, which can have an effect on mental wellbeing (Srinivasan et al., 2014; Maloret & Sumner, 2014). Individuals with an ASD are all different from one another demonstrating different limitations and severities, affecting some individuals more than others (Cancro, 2008).

ASDs are one of the most frequent neurodevelopmental disorders in childhood according to Kuhaneck and Watling (2010), with the average age of diagnosis between 18 months and 2
There has been a significant increase in the prevalence of ASD over the past 10-15 years worldwide, increasing from 30 to 60 cases per 10,000 people in 2005 (Kuhaneck & Watling, 2010) to 1 in every 88 children in the United States in 2014 (Holt & Yuill, 2014). It has been found that boys are nearly 4 times more likely than girls to have the diagnosis of ASD (Kuhaneck & Watling, 2010).

Children with an ASD demonstrate difficulty with communication and social skills. These difficulties can affect the development of relationships with peers and family. The fundamentals of communication are learned in the first year of life. Children learn these from observation of nonverbal behavior, and interpreting and conveying emotions. These fundamentals teach an individual how to behave and respond in social situations (Kuhaneck & Watling, 2010). Individuals with an ASD demonstrate difficulty in the fundamentals of communication, mostly that “ability to integrate gestures with eye contact, affect, and voice” (Kuhaneck & Watling, 2010). Due to the difficulty with nonverbal communication and interpretation, many individuals with an ASD demonstrate an inability to comprehend abstract communication, such as humor, sarcasm, or words that may contain multiple meanings (Kuhaneck & Watling, 2010). Those with an ASD may also demonstrate nonverbal communications that are not consistent or unreadable to other individuals (Kuhaneck & Watling, 2010). Another area of communication that children with an ASD may demonstrate is echolalia, which is when an individual repeats what is said to him or her (Kuhaneck & Watling, 2010). They will not only repeat the word but also imitate the tone and rate of speech (Kuhaneck & Watling, 2010). These impairments with communication demonstrated by children with an ASD can impair the ability to create and sustain peer relationships and the ability to engage in group activities of play (Srinivasan et al., 2014).
Children with ASD tend to demonstrate more sensitivity than typically developing children to minor changes in the environment and tend to use the coping strategy of avoiding novel stimuli and insisting on sameness (Ashburner, Bennett, Rodger, & Ziviani, 2013). It has been found that individuals with an ASD use repetitive and stereotypical behaviors as adaptive responses aimed at controlling the incoming sensory input, therefore making it predictable (Ashburner et al., 2013). Individuals with an ASD demonstrate a heightened sensitivity to irrelevant input such as background noise or flickering lights, creating difficulty in filtering relevant stimuli from competing stimuli. This often leads to individuals with an ASD failing to notice others speaking to them (Ashburner et al., 2013). Ashburner, Bennett, Rodger, and Ziviani (2013) found that sensations that were expected, predictable, controllable and self-selected were perceived as tolerable, whereas sensations that were unexpected and not controlled by the individual were perceived as intolerable (p. 177). When incorporating play into children with ASD’s day, it is important to make the activity predictable, self-selected, and tolerable to sensations.

Research shows that individuals with an ASD who have impaired sensory processing also have difficulty with social play. It is found to be partially due to dyspraxia (Kuhaneck & Britner, 2013). Social play requires strong praxis skills for children with an ASD because they must adapt to changes in play schemes and introduction of new play ideas from others. In children with an ASD, the individual’s vision, proprioceptive, and tactile function are related to praxis and social play ability in combination (Kuhaneck & Britner, 2013).

Leo Kanner (1943) first described a core feature of ASD as including deficits in play (Preissler, 2006). It was found that children with ASD seldom engage in spontaneous play with peers. Play in children with ASD is less innovative and symbolic, and more developmentally
immature than typically developing children (Preissler, 2006). Children with ASD are often passive participants in play. These children offer limited to no initiation and approach peers in a one-sided manner (Preissler, 2006). There are few attempts to share objects or to share enjoyment with another child. Parallel play is a popular form of play with children with ASD because it involves children playing side by side without interaction. A child with ASD might be interested in socializing with other children but lack the ability for social engagement and thus will play next to others without communication (Preissler, 2006). The inability to play with other children interferes with the ability to socialize and develop relationships and the inability to develop relationships and socialize interferes with the ability to play. The child’s need for repetition and familiarity can interfere with the social interactions causing children with an ASD to isolate and engage in self-play (Schupp, Simon, & Corbett, 2013; Kuhaneck & Watling, 2010). This isolation as well as differences in behavior can cause the child to become a target for ridicule and rejection by peers, in turn affecting the child’s ability to socialize and play (Schupp et al., 2013). When children with an ASD attempt play with a peer, it is found that they tend to show increased stress and anxiety; increasing repetitive and sameness to calm themselves (Schupp et al., 2013). These children then lack involvement in team and non-team sports and activities and are engaged in activities that are more solitary (Srinivasan et al., 2014). According to Srinivasan, Pescatello, and Bhat (2014), “limited physical activity levels in individuals with ASDs may be attributed to their impairments in motor, social communication, sensory, and behavioral domains,” (p. 877).

For typically developing children, the sibling relationship provides a unique degree of familiarity and frequency of interaction. The relationship is part of the building blocks for the development of many skills for both children. While there are deficits in social interaction with
individuals with ASD, sibling relationships has been found to be a key medium for the
development of social and interactive skills (Knott, Lewis, & Williams, 2007). The possibility of
a negative disruption in the sibling relationship when one child is diagnosed with ASD is crucial
to recognize due to the beneficial nature of positive sibling relationships (Petalas et al., 2013).
Interventions that involve a broad range of family interactions within environments have been
identified to produce positive sibling relationships when one child is diagnosed with ASD
(Petalas et al., 2013). It has been found that children with ASD are able to participate in
reciprocal play when the typically developing sibling supports the interaction. Knott, Lewis, and
Williams (2007), found that the more that the typically developing sibling and the sibling with
ASD interacted and played, the higher the results of the child with ASD initiating play and play
themes; increasing the interest and social engagement of both siblings. Positive child parent
relationships are associated with developing positive sibling interactions (Petalas et al., 2013).
Parents educating their children on the diagnoses of ASD brings an understanding of differences
that can be generalized to many environments (Petalas et al., 2013). The occupation of play
addressed in the sibling relationship where one child is diagnosed with ASD will increase the
acceptance, bond and relationship between the siblings. The act of play is influenced by the
environment and interactions within the physical and social contexts (Watts, Stagnitti, & Brown,
2014).

In applying the Person-Environment-Occupation (PEO) model, the focus is on the person
or people involved in the environmental context and the occupation that is being performed
(Strong, Rigby, Stewart, Law, Letts, & Cooper, 1999; Turpin & Iwama, 2011). The quality of an
individual's experiences and satisfaction is the outcome of the fit between person, environment,
and occupation, This outcome is also known as occupational performance. Occupational
performance is shaped by the interdependence of person, environment, and occupation. “The person refers to the individual, a group of individuals, or an organization. The environment includes cultural, institutional, physical and social factors affecting occupational performance. Occupation is clusters of activities and tasks in which people engage while carrying out various roles in multiple environments” (Strong et al., 1999). The model focuses on the transactive relationship between person, environment, and occupation. Transactive means that the concepts are interdependent on one another (Turpin & Iwama, 2011). This indicates that one cannot have the person without the influence of the environment. Therefore, there is no environment without a person to interact within it. This allows individuals to view the concepts by looking at the person-environment, the environment-occupation, and the person-occupation relationships (Turpin & Iwama, 2011). Only with the transactive relationship between person, environment, and occupation can you then develop occupational performance. The PEO model will keep the intervention process of incorporating the occupation of play client centered for each individual sibling (Turpin & Iwama, 2011). Identifying the wants and needs of each child and the environments that play is participated in will increase occupational performance of effective and functional play skills between the siblings (Strong et al., 1999; Turpin & Iwama, 2011).

The PEO model fits in with the use of bringing siblings together through the use of play. The person is the child with Autism and the child that is typically developing. The environment includes the cultural aspects of the family, the sibling bond, and individual knowledge and personal aspects that each child brings. Finally, is the occupation of play (Strong et al., 1999; Turpin & Iwama, 2011). Looking at relationship of these concepts through PEO, allows a view of the relationship between the children and their home environment, their environment and the use of play, and the use of play with the children. This model also allows for the ability to
address these concepts over time through continually applying the model to the child's developmental stage and the new/recurring environments as well as varying aspects of play (Strong et al., 1999; Turpin & Iwama, 2011). Time is an important aspect because all concepts change over time. “People change over time as the environments surrounding them change. They change in their attributes, characteristics, abilities and skills and in the ways; they think and feel about themselves. Their sense of who they are and what they are capable of develops and changes as they interact with the specific environments that surround them” (Turpin & Iwama, 2011).

Dysfunction can be describes in occupational performance through the use of the PEO model (Law et al., 1996). When the fit between the person, the occupation, and the environment is not at an optimum level, occupational performance is impacted; creating dysfunction. From the diagnosis of ASD, the person-environment fit may become impaired (Law et al., 1996). The behavioral aspects of ASD may cause impairment in the environment based on the sibling bond that exists or the knowledge that each sibling has. Identifying which area is causing dysfunction in occupational performance is important to developing a maximum fit between the children, the environment, and the occupation of play (Law et al., 1996). Managing a play activity within an environment that both children would enjoy participating in will increase the sibling bond and relationship and reduce the likelihood of dysfunction within the relationship.

Within the framework of the PEO model, occupational therapists can collaborate with the family and other service providers to address social interaction and relationship issues between siblings during play where one child is diagnosed with Autism (Case-Smith & O’Brien, 2010). Facilitating play skills early in children is important so children can effectively interact within many environments such as their school, community, and home (Stagnitti et al., 2012).
Involving the typically developing sibling in the goals of therapy is shown to be effective but can be overwhelming for the child and a big task to manage (Case-Smith & O’Brien, 2010). Occupational therapists can work with families to identify positive coping strategies for the typically developing child in managing functional difficulties with their brother/sister with ASD during play (Dempsey, Llorens, Brewton, Mulchandani & Goin-kochen, 2011). Occupational therapists must ensure the person, environment, and occupation fit is applied throughout the goal development and an interaction between individuals is important in creating positive occupational performance. If there is an older sibling who can understand the diagnoses of ASD and wants to help their brother or sister, the sibling relationship can grow (Case-Smith & O’Brien, 2010).

Educating the typically developing child on what the diagnoses of Autism is and how it can affect their brother or sister, can be a positive method to promote social interactions between the siblings (Case-Smith & O’Brien, 2010). According to the authors, the knowledge of the disability of ASD is important to nurturing and forming positive sibling relationships (Sage & Jegatheesan, 2010). However, occupational therapists must take into consideration the cultural values and beliefs of a family during the ASD educational process. In a study by Sage and Jegatheesan (2010), an Asian American family believed that they were being punished, and this is why they had a child with ASD. Their typically developing child was never educated on ASD because the family never discussed it due to shame. The typically developing child was placed into a role of accommodating to his brothers needs and became overwhelmed and frustrated. In turn, he did not want to play or interact with his brother diagnosed with ASD (Sage & Jegathessan, 2010).
Evidence has shown inviting a typically developing child into sensory integration forms of therapy is playful and fun for both siblings (Case-Smith & O’Brien, 2010). Sensory integration refers to the integration and interpretation of sensory stimulation from the environment by the brain. Sensory integration focuses primarily on tactile, vestibular, and proprioceptive senses (Hatch-Rasmussen, 2014). The typically developing child can be guided in managing play activities with their brother or sister diagnosed with Autism Spectrum Disorder (Case-Smith & O’Brien, 2010). The children with Autism were found to be able to engage in a variety of play activities with their siblings when guided effectively (Meyers & Vipond, 2005). The therapist must facilitate interventions that increase role balance and cooperation during play between developmentally different siblings (Meyers & Vipond, 2005), as well as increasing the child with ASD’s ability to initiate the interactions and reciprocate their sibling’s initiations (Meyers & Vipond, 2005). If siblings can complete the occupation of play together, facilitation of closer bonds and interactive relationships between the siblings where one is diagnosed with ASD become attainable outcomes. Siblings with a warm and close relationship were a significant predictor in successful in later life adjustments and adaptations (Donley & Likins, 2010).

Family based intervention programs founded on behavior analysis have been found to produce dramatic improvements for young children with an ASD (Grindle, Kovshoff, Hastings, & Remington, 2009, p. 42). A study done by Grindle, Kovshoff, Hastings, & Remington (2009), found that all parents noted improvement in language and communication skills, as well as improvement with social skills after participating in a family based program (p. 45). Approximately one third of parents stated that they noticed an increase in their child’s play skills in such areas as ball play, recreational games, and independent play skills (Grindle et al., 2009).
Research has shown that the relationships between the child with an ASD and the parents increased significantly as well as the relationship between the child with an ASD and the siblings; demonstrating decreased negative interactions and more affectionate behavior (Cebula, 2012; Grindle et al., 2009). According to Cebula (2012), “parents on the whole perceived it to be an effective approach for their child” (p. 858).

In conclusion, the sibling relationship is a lifelong relationship and bond where a wide variety of social interaction and building of future relationship skills can be learned through positive interaction that can be generalized to a variety of social environments. Past and recent research has found that play is an important aspect in developing both peer and sibling relationships in those diagnosed with an ASD. Identifying and adjusting play behaviors between siblings where one is diagnosed with ASD will assist in improving the sibling bond and increase interactions. The sibling with ASD can use these social interaction skills learned through play with their sibling to build future relationships with peers. ASD contributes to complications with successful social interactions, including participating in effective play behaviors with others. The guide developed by the researchers aims to educate families and siblings of individuals with a child diagnosed with ASD how to help facilitate play activities to promote positive sibling relationships. Considering the significant difficulties experienced by children with an ASD and the importance of maintaining a positive sibling relationship, it was found that guiding effective play skills between siblings where one is diagnosed with ASD would be beneficial to the relationship, as well as beneficial to developing effective future relationships in differing contexts and environments.
This project began when a parent of children with disabilities shared her perspective of
her children’s relationship and how they play together. The researcher’s then took this
perspective and completed research to develop a guide to promote relationship building utilizing
play amongst siblings when one child is diagnosed with ASD. The guide is intended to be a
resource for occupational therapists to provide to parents to facilitate the occupation of play
between their children in different environments to increase positive sibling relationships.
Parents are provided with suggested play activities as well as forms to document the children’s
initiation and engagement during play in the facilitation of interactions between siblings. Play is
the primary occupation of children that helps in developing future skills and abilities necessary to
succeed in life as an individual and as a social being. The guide can then be reviewed by the
occupational therapists in collaboration with parents to develop goals and intervention strategies
to further increase social bonding through play. The sibling relationship is a lifelong relationship.
Past research has shown that incorporating a family based program using play as interaction
between siblings can improve play and communication skills as well as increasing the sibling
bond with less negative interactions (Cebula, 2012; Grindle et al., 2009). The literature reveals
that developing a genuine bond between siblings is beneficial to future social interactions within
multiple contexts. Children diagnosed with ASD have difficulties with initiating appropriate
social skills and often demonstrate poor relationship development. Through the use of play
children with ASD can learn to initiate and engage in social interaction thus increasing the
sibling relationship and bond.

The researchers gathered the information through use of evidence-based research and
other texts in occupational and play therapy journals and books. Play techniques will also be
gathered through assessing activities in the toy isle of shopping centers, looking for easily 
obtainable games and supplies that will assist in utilizing play as a mode for relationship building 
between siblings. Identifying a variety of play activities is important so the children can have the 
choice and be motivated to participate in play with their sibling. It is also important for the guide 
to provide documentation of what play activities worked well for the family, including behaviors 
noted during play. Documentation of spontaneous play between the children, which child 
initiated the play activity, and behaviors noted during the activity between the siblings is also 
part of the collaborative process between the occupational therapist and the family. With the 
information gathered the occupational therapist and the family could collaborate on other 
activities that may assist in developing a positive sibling relationship.
PRODUCT
Play: An Effective Avenue to Building Positive Sibling Relationships

By Anne M. Lee, OTS
Kasie L. Parker, OTS
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Quality relationships are important and needed in human life. The sibling relationship is an important bond to maintain within a family dynamic, because it is a lifelong relationship (Sage & Jegatheesan, 2010). Siblings are not only family members; this unique relationship also consists of the siblings being peers, companions and constantly present throughout each other’s lives (Sage & Jegatheesan, 2010). Many individuals diagnosed with Autism Spectrum Disorder (ASD) have difficulty forming and maintaining relationships (Travis & Sigman, 1998).

This guide is developed to assist in the building of positive sibling relationships through the use of play. The guide will be used by parents/caregivers with at least two children where one child is diagnosed with Autism Spectrum Disorder. It will assist parents in helping their children play together. Children with ASD face difficulties with interacting effectively with others around them. Using play to increase the interaction between these siblings will teach the child with ASD how to positively develop future relationships and to improve the relationship between the siblings; an enduring relationship.

All children should be provided the opportunity to participate in a variety of play activities, no matter the ability level of the child. Play is the foundation for skill development and interaction amongst children. Not only is it the foundation, but play is fun, adventurous and creative. Assisting children to play with their siblings will not only increase the development of a positive sibling relationship, but also helps build skills needed to interact in future relationships.

“The act of play extends far beyond the recreational factor” (Preissler, 2006). Through play with other children, children learn social norms and rules, and learn to engage in social roles during play (Stagnitti, 2004).
Play involves a variety of skills from the children such as: decision making, taking turns, problem solving, emotional regulation, language, social competence, communication, symbolic use of objects, monitoring, and reciprocity (Preissler, 2006; Stagnitti, O’Connor & Sheppard, 2012; Watts, Stagnitti, & Brown, 2014). Play also allows children to practice skills such as sharing (Preissler, 2006).

Peer play in early childhood is important for developing social norms and communication (Kenney, 2012). The type of play children engage in provides an understanding of how they view the world around them (Christensen et al., 2010). When children interact in an activity that they consider play, it improves the emotional wellbeing and happiness of the child (Howard & McInnes, 2013).

Children with disabilities may be unable to accurately or consistently develop complex play skills limiting current or future ability to interact and communicate with others (Christensen et al., 2010). Play is an important aspect in developing peer relationships; specifically those between siblings.
How to use the guide

When looking through the guide, the first half includes a list of play activities that can be facilitated to increase sibling relationships. With these activities, will be directions to complete the activity, the reasoning for why it would be a good activity and modifications that can be made to the activity. The second half of the guide includes space to create your own activities, space to document how the children are responding to the activities, and if spontaneous play is initiated. This space is provided for you to document about what information you think is important to remember and discuss with the occupational therapist.

Plan about thirty minutes to spend on a play activity to allow for full engagement from all children. Let the children’s energy level and time of day guide you. Children are less likely to stay engaged if they are sluggish. Feel free to develop your own play activities or allow the children to develop their own. This guide is not about only using the activities listed, but to allow for learning about how different activities can facilitate different reactions and create positive relationships.

Allow activities to be changed and modified as needed to allow for engagement from children. Make sure that the play activity is enjoyed by the children and try to incorporate interests that the children like. Allow children the opportunity to develop their skills and abilities through the activity of play, as well as the development of the sibling relationship. The guide will assist in allowing the siblings to grow as individuals and together as siblings.

The use of play for children is about the “just right challenge.” The play activities need to allow for enjoyment and development, but not be so difficult that the child feels like they failed. Overall, let the children be themselves. Allow for expression of whom the children are and make sure that everyone is engaged and having fun.
Tips to teach children what ASD is

Autism spectrum disorder (ASD) is characterized by difficulties in communication and social skills. Children with ASD typically demonstrate repetitive and stereotypical behaviors, interests, and activities (Srinivasan, Pescatello, & Bhat, 2014; Kuhaneck & Watling, 2010; Kuhaneck & Britner, 2013). These behaviors can impact relationships with siblings and peers. Facilitating activities amongst siblings can assist in the development of a positive sibling relationship. Play is children's primary activity in life and can assist in the development of sibling relationships.

Remember that when using play with children with ASD, there are things that can affect positive play. A child's sensory abilities are important to consider when facilitating play. Allowing the play activities to incorporate sensory experiences and facilitation is important in developing skills and abilities.

The diagnoses of ASD can be a confusing concept to the typically developing child who has a brother or sister with the diagnoses. Educating your typically developing child on the diagnosis may be difficult, but it is important to the sibling relationship.

- Provide examples of communication and interaction difficulties with ASD.
  - “Your brother/sister has difficulty telling you what he needs and wants from you.”
  - “Your brother/sister may not understand how to play with you; you will need to show him how.”
- Use role playing for a visual presentation for the child
- Allow for the child to ask questions and express feelings
- Educate them on positive aspects of their brother or sister
  - “Your brother/sister may think or act differently than you do, but listening to him/her when you are confused will help you see what he/she is trying to say.”
• Educate them on how they can help their brother or sister
  o “Try and show your brother/sister what you are trying to say.”
  o “Ask your brother/sister if he needs help. Show him how to do something
    and if he still does not know, show him again.”

• Use simple terms and explanations ex.
  o “Your brother/sister may not want to play the same things you do, or
    he/she may want to play them in a different way.”
  o “If your brother/sister gets angry or upset, it is okay. Walk away from
    him/her for a little bit. Then you can return to what you were playing.”
  o “If your brother/sister does not seem to understand what you are saying,
    try saying it in a different way or try and show him/her what you are
    saying.”

• Have them explain to you what they know and/or have learned
Team Scavenger Hunt

Supplies needed: List of items to find when out in the community.

Example:

People Watching Scavenger Hunt

Do this scavenger hunt in a crowd of people. Cross people off the list as you see them.

Find Someone.

- Wearing Glasses
- Wearing a Hat
- Who is Bald
- Looking at their Phone
- Reading a Book
- With a Mustache
- Wearing Shorts
- Wearing Flip Flops
- With a Baby
- Wearing Something Yellow

How to Play: When you are out and about within the community running errands with your kids along, provide each child with a list of items to work together and find.

Complete the activity where there are many people around. If the children find all the items on the list and they use appropriate interaction skills with each other they can be provided with coins or a treat at the end of the day.

Purpose: The hunt will allow the children to play together, and they will have to work together to reach the final goal. They will have to communicate effectively with each other to strategize how they will find all the items on the list. This will teach them skills on how working as a team and using each other strengths is beneficial to reaching a goal; improving their relationship. Providing the children with rewards for completing the hunt assists each child to recognize his/her strengths as well as the strengths of their brother or sister. The praise provided will increase acceptance between the siblings increasing their bond. The hunt will also increase the awareness of the children in regards to others around them within the community; increasing effective future peer relations.
Modifications:

- The children can also compete against each other to complete the scavenger hunt individually and the winner receives a prize.
- Depending upon the age of the children, they can receive signatures from the people they find items on, to increase social interaction and communication with others.
- The list may be modified depending upon the season or the location of the errands to be ran.
- A scavenger hunt can be completed within the home or outside.
- Use items instead of people.
Obstacle Course

**Supplies needed:** A handkerchief for the three-legged race, three pillows to jump over, and two chairs to climb under.

**How to play:** The children will work together to get through every activity placed in the obstacle course. First, place the three pillows on the floor with enough space in between for the child to land after jumping. Second, place two wooden table chairs next to each other that the children have to wiggle, underneath in between the legs. Start the course with the three-legged race. Have the children stand side-by-side. Tie one of each of their legs together with the handkerchief. Next, have them untie their legs to proceed with the wheelbarrow walking, followed by the crab walk. Finally, they will have to jump over the pillows and climb underneath the chairs while assisting each other when needed and patiently waiting for the other child to get through this portion of the course. They can cheer each other on while completing the course to encourage each other through the activity.

**List of activities:**

- **Three-legged race:** The children complete a 10-foot run with the left leg of one child strapped to the right leg of the other child. The object is for the children to run together without falling over.
- **Wheelbarrow walking:** child maintains a stationary wheelbarrow position; the child then walks with legs being held up in the air by the other child. The children will go 10 feet in the wheelbarrow walk and then switch positions.
- **Crab walk:** child walks in a position with back towards the floor, walking on hands and feet and making sure that no other parts of the body are touching the floor. The children will go 10 feet.
**Purpose:** The obstacle course will allow the children to play together, and work effectively together to complete the activity. They will have to communicate and listen to each other to strategize how to complete the activities effectively. The activity will also teach the children how they can effectively help each other out in times of difficulty; increasing the relationship and bond.

**Modifications:**

- The activities may be modified, removed, or added depending upon the season or the location where the obstacle course is being completed.
- The distance activities can be modified by changing the distance and speed at which to complete them.
- Activities can be completed within the home or outside.
Mummy Wrap

Supplies needed: toilet paper

How to play: The children will take turns, with one child at a time playing the “mummy”. The mummy must stand still while the other child wraps a full roll of toilet paper around the child that is the mummy. Once a child is fully wrapped, then the toilet paper can be removed and the children switch positions.

Purpose: Mummy Wrap will allow children to play together, teaching them skills of taking turns and communicating wants. This activity will allow the children to show their individual personalities and traits while allowing them to be part of a group in developing a relationship.

Modifications:

- Different materials can be used other than toilet paper, such as paper towels.
- If the children do not want to be mummies, it can be changed to making a dress or a suit out of toilet paper.
Modified Baseball

**Supplies needed:** baseball, bat, tee, baseball glove, and supplies needed for each base activity.

**How to play:** The child comes up to bat either on a tee or to be thrown a slow pitch and the child hits the ball and runs around the bases. Each base has a different activity at it. Depending on the child’s age and abilities, different activities can be placed at each base.

List of activities:

- Trampoline
- Climbing wedge
- Hula hoop
- Jump rope
- Jumping jacks

The child must hit the ball, go through all three bases, and return to home base. No score is kept but children can be awarded for each home run made by supplying with something that the child enjoys. Each child takes a turn.

**Purpose:** This activity will allow children to work together and encourage success and positive growth in each other. Working together, communicating, learning, and encouraging each other’s abilities will help the siblings to grow as individuals and as a team to increase relationship development.

**Modifications:**

- The activities may be modified, removed, or added depending upon the children
• Depending on age and ability of children, one child may pitch instead of using a tee.
• Complete repetitions of each activity as tolerated, but ensure that the siblings complete equal repetitions.
Red Light Green Light

**How to play:** In this game, one child plays the "stop light" and the other children tries to touch him/her. At the start, the children form a line about 15 feet away from the “stop light.” The stop light faces away from the line of kids and says "green light". At this point, the kids are allowed to move towards the stoplight. At any point, the stop light may say "red light!" and turn around. If any of the kids are caught moving after this has occurred, they are out. Play resumes when the stop light turns back around and says "green light". The stop light wins if all the kids are out before anyone is able to touch him/her. Otherwise, the first player to touch the stop light wins the game and earns the right to be "stoplight" for the next game.

**Purpose:** The children will have to use effective communication and listening skills whether he/she is the “stop light” or the “car.” These communication and listening skills will teach the children how to successfully direct their brother or sister in the right direction. Being able to coach/teach each other techniques will help increase their relationship. The children will have to manage themselves so they do not continue moving towards the light after informed to stop. The children must also follow rules and when they make a mistake, then must accept being out or returning to the beginning of the line. Having rules will show the children that there are also boundaries in their relationship with their sibling, and when these boundaries are crossed, consequences will arise. Establishing rules and boundaries to follow will increase a positive sibling relationship.

**Modifications:**
• If there are two siblings then the child who is the “car” must make it to the “stop light” in order to become the “stop light.” If the “car” continues after told to stop, he/she must return to the start line and being again.

• A shorter distance or longer distance can be made between the children depending upon the location of the activity. In addition, if a child is having a difficult time following the commands, then a shorter distance may make it more successful for the child.

• If you have a child that is nonverbal place a green circle on his/her back and a red circle on his/her front. Ensure she/she has an understanding of how to play the game by providing a visual representation of how to play.
Simon Says

**How to play:** Each child will be given the chance to be the leader; aka “Simon.” Simon then orders the other child to complete an action; only if the action begins with “Simon says” should the action be completed. If Simon states an action without saying “Simon Says” and the other child completes the action the child will have to sing the ABC song or the “I’m a little teapot” song using the arm motions. They cannot continue to play until they have performed the consequence of not listening to the leader.

**Purpose:** The game increases communication and listening skills between the children. If one child is not effectively communicating commands, then the other child will not understand what action to do. If one child is not actively listening, they will perform an action that is not to be completed, and there will be consequences for their actions. If a child does have difficulty with communication and/or listening skills, their brother or sister can assist in teaching them these skills through the use of the activity. The game will increase the in communication and listening skills between the children during interactions so positive interactions can occur in the future.

**Modifications:**

- Parents play too to show if the wrong action is completed, a player is out until the next round.
- Provide the child with examples of actions that can be completed if they are having a difficult time thinking of some.
- Let each child be the leader for 5 minutes then switch roles.
- Different consequences can be used when a child performs an action that did not begin with “Simon Says.” (Ex. make animal sounds do their best dance move.)
- If one of the children is a nonverbal child, you can take pictures of the child performing different movements that they will have to show to their brother or
sister, as well as a card that has written out “Simon Says.” This way, the child can show this card if he/she wants the other child to perform the action.
Hide and Seek

**How to play:** The object of Hide and Seek is for the person who is "it" to find the other players who are hiding. Each child will take turns being “it.” The child who is “it” will cover their eyes and count to 50 while the other child hides somewhere in the environment. After counting to 50, the player who is "it" attempts to find the other child. Once the child who is “it” locates the other child, the other child becomes “it”.

**Purpose:** The activity of hide and seek is used to increase a child’s ability to participate and use visual abilities. The children must learn to maintain quiet and be creative in locations of hiding to be effective in participating in the game. This game is not to say that one child is better at it than another, but to bring children together in a fun, safe environment, using their cognitive skills to locate the hider. The activity will increase the seekers ability to try and think like their brother or sister; to try to understand where he/she would hide. This will assist the children in understanding what their brother or sister is thinking in different situations; increase the bond in the relationship.

**Modifications:**

- The time frame of which to count can be altered. If the child is unable to count, a timer can be set.
- The game may be modified depending upon the environment and the hide spaces available
- Can be completed within the home or outside.
Follow the Leader

**How to play:** Each child takes a turn being the leader. The children line up and do everything the leader does. The leader leads the group any direction they want and tries to make up funny things for everyone to do after them. Skip, turn in circles, summersault, crab walk etc. If any player makes a mistake or refuses to follow the leader the child must complete 10 jumping jacks.

**Purpose:** The activity of follow the leader enables children to learn to follow directions and use their visual and communication skills to give and receive actions. If one child is not effectively communicating or demonstrating actions, then the other child will not understand what to do. The game will teach the children that, at times in their relationship, they both must take initiative and lead or guide their sibling in the right direction and how to do this in an effective way. The game will also increase in the communication, listening, visual, and demonstration skills between the children so positive interactions can occur in the future.

**Modifications:**

- Set different time limits
- Different activities may be used other than jumping jacks when a child makes a mistake; such as push-ups, etc.
- For younger children, have everyone sing, “We’re following the leader, the leader, the leader .... We’re following the leader wherever they may go.”
Balloon Saving

Supplies Needed: 10 standard balloons filled with air, a pool noodle and a chair.

How to Play: One child will sit in the chair and the other children will stand close by the sitting child. A parent will then toss balloons at the child sitting in the chair. The standing children must make sure the balloons do not hit the seated child by batting away the balloons with the pool noodle. The goal of the game is to not allow any balloons to make contact with the seated child. Once a balloon has touched the seated child, the children must switch positions, enforcing the importance of protecting the other sibling.

Purpose: The game will teach the children protection skills for their siblings as well as for themselves. The balloons are something that should not touch the children, and one child must stop this from happening. This will improve each child's skills in protecting their siblings during times of stress, improving the sibling bond and relationship.

Modifications:

- If there are more than two children, one of the children can throw the balloons.
- The children can bat away the balloon with their hands instead of the pool noodle.
- Number of balloons
Journaling Space

This space is provided for you to document how the children are responding to the activities and to create your own activities. This information will then be discussed with the occupational therapist.

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Spontaneous Play

Spontaneous play is when the children are motivated to play without anyone prompting or directing them. The children choose what they want to play and direct the experience together. Spontaneous play is important to the development of children because it promotes intellectual development and discovery of the physical environment around them. The children can also gain problem solving skills, language skills, social skills and find a variety of possible solutions through spontaneous play activities.

This space is provided to document if the children are participating in play activities without the use of parent facilitation and who is initiating play.
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<th>Play Activity</th>
<th>Interactions between the children</th>
<th>How long did the children play</th>
<th>How do you feel it went?</th>
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SUMMARY

The purpose of this project is to facilitate in the building of positive sibling relationships with the use of play, when one child has ASD. An extensive literature review was completed defining the importance of sibling relationships and the skills that can be gained in the relationship to foster future peer relationships. The diagnoses of ASD places challenges due to difficulties in communication and social interaction skills (Srinivasan, Pescatello, & Bhat, 2014; Kuhaneck & Watling, 2010; Kuhaneck & Britner, 2013). The occupation of play is a creative interactive activity that all children participate in regardless of challenges faced. According to the sociocultural theory of play as socialization, through play with other children, children learn social norms and rules (Stagnitti, 2004). Play being an occupation that all children participate in, can be implemented to build strong and lasting bonds between siblings (Christensen et al., 2010). The guide is a resource for occupational therapy practitioners who work with children with the diagnosis of ASD, and has been developed for the occupational therapists to collaborate with parents/caregivers to assist in guiding positive sibling relationship. The guide will assist occupational therapist in helping the parents use play to build lasting positive relationships between their children and collaborate on new ways to impact the sibling relationship.

The product has many strengths, such as being applicable to many families, providing multiple activities and space to document information that the parents and therapists will need to assist in the development of a positive sibling relationship. In additions there are opportunities to document on other play activities that were successful between the children, that can be used later to develop successful relationships between the siblings.

There are also limitations to the study and product. These limitations are that exact age ranges of the children are not identified, as well as the the severity of the ASD diagnoses. Which
may affect the play activities provided. The activities provided in the guide are not specified for males or females which may cause difficulty in motivating play; the activities are unisex activities. Another limitation could be time constraints of families, parents having the time to facilitate effective play between their children. Finally, all children are different and unique individuals. The relationships built between siblings will be different for all. Each child will react differently to the play activities.

Further research needs to be completed to develop a better understanding of the impact of the sibling relationship and how different occupational activities may influence the relationship. Throughout time the guide may be modified to alter, add, and delete activities based on future research and the impact that the guide has on families where one child is diagnosed with ASD. It is advised that, research also be conducted to evaluate the sibling relationship amongst siblings with different diagnoses and developmental delays.
REFERENCES


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