

Play & Autism: More evidence for following the child's lead

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A little boy sits on the floor, pushing a car back and forth. His mother approaches, pushing her own car, and says "Hey, let's go to the car wash". She takes her car and pushes it towards the "car wash", which is a structure she made out of blocks. She looks back at her child who has ignored her suggestion and continues to push his car back and forth. "Push your car over here" says the mother, who is ignored again by her son. She helps him push his car to the car wash, where she pretends to wash his car by rubbing it with a Klennex. The little boy seems oblivious to her actions, leaves the car wash scene, and heads for the kitchen. The mother watches him walk away – her face is ridden with frustration.

Sound familiar? Those of you who work with young children with autism have likely observed this scenario countless times – children who don't know how to play, and parents who don't know how to play with their children. The play challenges of children with autism are well-documented, but parents' abilities to foster their child's play skills are not (Freeman & Kasari, 2013). To address this gap in the literature, Freeman & Kasari (2013) examined parent strategies that promote longer and more connected play interactions in a recent article in the journal Autism, "Parent-child interactions in autism: Characteristics of play".

Examining how parents and children play

Because children with autism often have repetitive or unusual play or lack symbolic play, their parents may have difficulty finding ways to interact with them during play. Freeman & Kasari (2013) explain that "it can be very difficult for parents to engage the child in reciprocal, symbolic, turn-taking play episodes without intervention" (p. 148). Therefore, it is important to know which parent strategies promote sustained, engaged play interactions with children with autism.

Freeman & Kasari (2013) designed their study to determine how parents play with their child with autism, and to examine which strategies lead to longer and more connected play interactions. They studied 16 typically developing children (mean age 28.5 months) and 16 children with autism (mean age 49.5 months), who were matched on receptive and

expressive language age. The average expressive and receptive language ages of all of the children were between 37-38 months.

Play Assessments

All of the children in the study participated in the following play assessments:

Structured play assessment – Freeman & Kasari used a structured play assessment procedure described in Ungerer & Sigman, 1984. The examiner presented the children with individual toys and toys in groups (such as dolls, a tea set, trucks, telephone, brush, mirror). The children's play behaviour with the toys was coded according to the type and frequency of play. Each child received a play score which represented their highest, most frequent, and flexible level of play during a structured situation with an examiner.

Analysis of free play with parent – parents and children were also videotaped during free play for 10 minutes. Parents were asked to play with their child as they would do at home.

Behaviors coded during free play with parent:

- **play schemes** play schemes are sequences made up of connected play acts with connected toys, like a tea party or a dinosaur battle. The duration of play schemes was recorded, as well as who initiated and ended the play scheme (parent or child).
- **type of play acts** play acts are acts that make up a play scheme. The level of play acts was noted (e.g. simple object manipulation, combining objects, imaginative play, etc), as well as who carried out the play acts (child or parent).
- how play acts were presented (what strategy was used) parents and children could:
 - suggest a play act by verbally modeling or gesturing to suggest a new play act using a nondemanding, indirect statement or physical motor movement (e.g. handing the child a toy cup, saying "here's some tea").
 - command a play act by requesting a motor action and/or verbal response from the other using a direct imperative (verbalization, hand-over-hand prompt, or gesture) (e.g. "give your dolly some tea"; using hand-over-hand to help child bring a cup to the doll's mouth).
 - \circ imitate the previous play act either their own act or the act of the other.
- each response to a play act and whether the response was at a higher, lower, or matched/expansive level compared to the previous act. Matched/expansive acts matched the level of the previous play act or were one level higher.
- the overall level of play for each parent and each child during free play this was determined based on their level of play acts (how sophisticated the play was) and their presentation of the play acts (whether they were suggested, commanded or imitated)

Key findings

Parents' and children's level of play

- both groups of children played at approximately the same level during free play with their parents – they played at the "pretend self" level, which involves relating objects to oneself using a pretend action, such as pretending to drink out of a toy cup.
- all children played at a lower level during free play with their parents than during structured play with the examiner
- parents of typically developing children matched their play level to that of their child – these parents responded within their child's "zone of proximal development" (Vygotsky, 1986), with either an act that matched the level of the child's previous play act or was slightly higher than the child's act. This "zone" is thought to scaffold the child's learning of new and emerging skills (Freeman & Kasari, 2013).
- parents of children with autism played about one level higher overall than their child's level of play Freeman & Kasari (2013) explain that "parents of children with autism had much greater difficulty than parents of typical children in playing at or just above their child's play level" (p. 158). The parents of children with autism in this study may have tried to match their child's mental or chronological age when playing, rather than their child's actual play level, and this resulted in playing at too high a level (Freeman & Kasari, 2013).
- children in both groups responded to their parents' play acts with an act at the same level

Qualities of parent-child interaction during free play

- parents of children with autism used more suggestions and commands to introduce play acts than the parents of typically developing children -Freeman & Kasari (2013) suggest that parents of children with autism may naturally try to direct the play and "teach" their child (through commands and suggestions) when their child doesn't naturally respond to their attempts to engage. However, they explain that "resorting to didactic-oriented teaching or interactions that are not balanced between adult and child may reduce mutually sustained interactions" (p. 158).
- parents of children with autism initiated more play schemes and had longer lasting parent-initiated schemes than parents of typical children. When I first read this result I was surprised, because I thought that the more directive style of these parents would result in shorter parent-initiated schemes. But Freeman explained that because the parents of the typically developing children were less directive in general, they initiated fewer play schemes and engaged in more child-

directed schemes. As a result, the typical children took the lead more often, and engaged in fewer and shorter parent-initiated schemes than the children with autism (Freeman, 2014, personal communication).

 both groups of children initiated about the same number of play schemes but play schemes initiated by typical children lasted longer than schemes initiated by children with autism.

Characteristics of longer play interactions

- child-initiated schemes with "matching/expansive" responses from parents are longest - across the whole sample, longer schemes were initiated by the child and characterized by matching/expansive acts by the parents. Parent-initiated schemes that were characterized by parent matching/expansive responses within the scheme were longer than schemes with higher or lower responses, but these schemes were not as long as child-initiated schemes with parent responses that were matching/expansive (Freeman, 2014, personal communication). Therefore, Freeman and Kasari (2013) explain that working within the child's zone of proximal development (at or slightly above the child's current level of play) promotes and maintains joint engagement.
- **imitation results in longer interactions** when Freeman & Kasari analyzed the longest play sequences between all parents and children, they noted that imitating the child's play acts resulted in longer engagement. Furthermore, "in this study, parents of children with autism who imitated their child more, and whose children in turn imitated the parent, had as long a play sequence as dyads with typical children" (Freeman & Kasari, 2013, p. 159). They conclude, therefore, that imitating the child's actions can extend the length of an interaction.
- **directiveness results in shorter interactions** parents who commanded their children or controlled the play had shorter play routines.
- longer play interactions with children with autism are possible when parents of children with autism were able to achieve longer play interactions with their child, these play sequences were almost equal in duration to the sequences of typical children.
- typical children ended play schemes more often than children with autism Freeman explained that the parents of children with autism were not matching their children well, and shifting quickly to new play ideas. As a result, the children with autism did not have as many opportunities to end the play because their parents were directing them toward new play ideas (personal communication, 2014). When children with autism did end a play scheme, however, it was sometimes the result of the parent or child acting at too high or too low of a play level (whereas this rarely ended play schemes with the typically developing children) (Freeman & Kasari, 2013).

The bottom line...

Freeman & Kasari's (2013) study demonstrated that:

- parents of children with autism have difficulty playing within their child's zone of proximal development
- parents of children with autism tend to be more directive during play (suggesting and commanding more often), which results in shorter play interactions
- children match their play level to that of their parents
- imitating a child with autism results in longer play interactions/engagement

Freeman & Kasari conclude that their data should "be useful in designing effective targeted interventions for parent-mediated interventions for children with autism" (Freeman & Kasari, 2013, p. 159).

Helping parents play

In personal communication with Dr. Freeman (2014), she explained that the results of their study fit nicely with the approach in our Hanen programs, in which parents wait for their children to initiate, and then match or imitate their children's play level. She also highlighted the importance of expanding children's play within their zone of proximal development to help the children develop and progress. There are several key points we should keep in mind when helping parents of children with autism follow their child's lead as they play together:

 parents might find play challenging – children with autism often have unique or repetitive interests, limited play skills, and/or lack of social engagement. As a result, parents sometimes find it difficult to start a play interaction or to keep it going. This is reflected in Freeman & Kasari's observation that parents of children with autism had difficulty playing within their child's zone of proximal development, and that they resort to commanding and directing their child in an attempt to get their child's attention.

Therefore, before targeting communication skills, we might sometimes have to take a step back and establish a context for our communication intervention. Helping parents find ways to engage their child during play by determining the right types of toys and the right play strategies can be a great first step in intervention.

Another option is to begin by targeting "People Play", or social routines with people that don't involve toys, such as chase, peek-a-boo, or horsie rides. By taking the toy out of the equation, the child can focus on interacting with his parent, instead of having to shift attention between a toy and his parent. <u>Click here</u> for a short article

to share with parents about using the Hanen R.O.C.K. strategy during People Games. We also have a new Hanen booklet series, "Make Play R.O.C.K.", which helps parents learn ways to promote their child's play skills. The first booklet in this series, <u>"Plan for People Play"</u>, helps parents learn ways to promote interaction and communication using People Games. "Plan for People Play" is available now. The remaining three booklets in this series will be available later in 2014.

- parents should follow their child's lead Freeman & Kasari (2013) showed that didactic-style interactions in which parents attempt to direct and "teach" their child result in shorter play interactions. This lends support for the child-centred Hanen® approach, in which we help parents follow their child's lead. In the More Than Words® program, parents learn to follow their child's lead by observing, waiting, and listening to their child, as well as using "The Four I's": Including their child's interests, Interpreting their child's messages, Imitating their child, and Intruding. All of these strategies involve observing the child's messages and actions, and matching the parent's response to that of their child. It is important to note that these strategies are taught at the beginning of the program, as following the child's lead needs to be established before other strategies can be added. When working individually with parents of children with autism, it is also important to focus on this first, so that a child-centred style is adopted when playing. This can be a particular challenge when working with parents of children with autism, as there are competing approaches in autism which advocate a more directive style. But if our ultimate goal is sustained interactions during which we can promote communicative turns, Freeman & Kasari's (2013) results certainly underscore the importance of establishing a less directive interaction style by parents.
- parents need to play within their child's zone of proximal development parents had difficulty with this in Freeman & Kasari's (2013) study. We should ensure that parents are not responding to their child at a play level that is too high (or too low). When parents match their child's play level, interactions last longer and joint engagement is promoted. Parents should also respond in ways that are slightly above (but not too far above) their child's play level, so that their child benefits from modeling within their zone of proximal development. In order for this to happen, we need to raise parents' awareness about their child's current play skill level. Having parents observe their child and fill out a play checklist can help parents become aware of their child's play level. And discussing specific play goals for both parents and children is also very important.
- the power of imitation there have been many times while leading the More Than Words® program that I've encountered parents who are at a loss to know how to "get into" their child's play due to their child's unconventional play. My tried-testedand-true advice for these parents is, "when all else fails, imitate your child". It's been very rewarding to watch frustrated parents let go of their agenda and simply watch

their child and do what he or she does. This almost always results in the child taking notice of the parent's actions, and a sustained interaction during which the parent can eventually introduce a new but related play idea, thereby expanding their child's play. The power of imitating is confirmed by Freeman & Kasari's (2013) observation that imitating the children resulted in longer play interactions. Imitation is also a useful strategy for us to use during direct intervention when we are faced with a child who has little social engagement and restrictive play skills. It can be difficult to let go of our communication goals and intervention agenda. But taking a step back and imitating a child in order to establish an interaction can be a valuable first step in accomplishing other goals.

choosing toys that promote play – Freeman & Kasari (2013) didn't examine the impact of different types of toys on parents' and children's abilities to play together. The children in their study were verbal children (average language age 37-38 months) who engaged in some pretend toy play. Parents of children who struggle with toy play or are less verbal might find play even more challenging than the parents in this study. For children with less play skills, a good place to start can be with a "people toy". These are toys for which the involvement of another person is necessary, such as bubbles, balloons, or wind-up toys. Because a play partner is needed to operate the toy or help the child in some way, these toys facilitate interaction.

By helping parents follow their child's lead, play within their child's zone of proximal development, and imitate their child, we will promote how parents play and how children interact and communicate with their parents. Furthermore, and possibly more importantly, parents will discover new ways to connect and have fun with their child.

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