
Pretending to Play or Playing to Pretend

The Case of Autism



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An article by Angeline S. Lillard and others published in the January 2013 issue of *Psychological Bulletin* about the impact of pretend play on child development raised a number of issues about play studies and child psychology. The article claimed that, contrary to current theories on the subject, the evidence of many studies does not support causal explanations of play's relationship to most childhood development. Here authors Kasari, Chang, and Patterson review these arguments about play and development in relation to children with autism—children who show specific deficits in pretend play. The authors argue that the study of these children provides a unique opportunity to consider which elements in play are important and how play skills are associated with different periods of child development. They conclude that, because pretend play requires intervention for the majority of children with autism, improving pretense in these children may shed more light on the causal impact of pretense on later developing skills in children. **Key words:** child development and pretend play; children with autism; functional play; intervention in play; symbol play

A RECENT ARTICLE by Lillard, Lerner, Hopkins, Dore, Smith, and Palmquist (2013) questions the prevailing assumption that pretend play contributes crucially and uniquely to children's overall development. Though their article focuses squarely on neurotypical development, the topics they examine also magnify issues related to the development of play in children with autism spectrum disorder (ASD). In this article, we respond to several specific points that Lillard and her colleagues raise to explore how the study of children with autism may teach us generally about play.

As noted in the Lillard article, children engaging in pretend play by definition demonstrate positive affect, intrinsic motivation, flexibility, and non-

literality with toys. By its very nature, pretend play is not rigid, and it cannot be demanded by others or approached as a task. Play may be the “work” of children, but this type of work is creative and enjoyable. Children are driven to play because it is so pleasurable.

Children also spend inordinate amounts of time playing. Many believe that children gain downstream developmental benefits from engaging in pretend play. Lillard’s article dispels this belief by evaluating the strength of the evidence for claims that pretend play causes improvements in cognition, the use of language, and social skills. The article considers the potential benefits of pretend play in terms of three different theoretical interpretations. First, Lev Vygotsky argues that pretending causes children to think more abstractly. Second, Jean Piaget considers pretending an epiphenomenon where play represents an ability that travels with other important skills; he thinks these other skills actually cause the development. The third viewpoint holds that pretending helps foster some later development but that it is only one of several possible routes to such development. Those holding this view refer to equifinality (i.e., different behaviors and skills can lead to the same result) and minimize the causal influence of play on later development. After reviewing correlational and experimental studies of play, Lillard and her coauthors find little causal evidence of the impact of pretend play on later development. Instead, they conclude that viewing the influence of pretend play through the perspective of epiphenomenalism or equifinality better fits the current evidence.

Can We Learn about Typical Play Development from Atypical Development?

Although the Lillard article focused on play in typically developing children, play also figures prominently in characterizing children who develop “atypically.” Developmental psychopathology recognizes the importance of both typical and atypical development in uncovering the basic mechanisms of developmental pathways that diverge toward pathological outcomes. Because many domains overlap in early typical development, researchers have difficulty teasing apart the mechanisms underlying a particular developmental phenomenon. Asymmetry in development—where some processes lag behind, and others do not—can be common in children with developmental disorders. Thus, studying these children may provide a window into necessary developmental processes. In the case of pretend play,

children with autism may be particularly illustrative. Ever since Kanner (1944) described his case series of eleven children with autism in the 1940s, children's engagement with objects and people has been of keen interest and intense study.

As background for this article, we describe studies of play (and particularly pretend play) in children with autism, addressing four issues related to the review of pretend play by Lillard and her coauthors that may not be evident from a study of typical development. We highlight the elements that define pretend play (intrinsic motivation, positive affect, nonliterality, and flexibility) and discuss the problems that including such elements in a definition of play raises for understanding play in children with autism. We also focus on whether we can differentiate performance from competence in the play of these children. For example, even if a child understands pretense, he or she may not actually engage in pretense while playing. Our third concern lies with the notion of "development" itself. While the Lillard article focused its review on the effect of pretend play on the downstream development of abilities, another issue concerns prerequisite abilities needed prior to the appearance of pretend play (Leslie 1987). Are there prerequisite skills necessary for the emergence of pretend play? This issue may be of particular concern to studies of children with autism who are delayed in their play abilities. Finally—also related to development—is the question of how one might go about teaching pretense. Teaching a child to pretend play may not be the same as pretending in play. How can we detect the difference?

Play in Children with Autism

Autism affects one in eighty-eight children, and it is characterized by impairments in social, communication, and behavioral development (CDC 2012). Early developing core deficits are found in prelinguistic communicative abilities (e.g., joint attention) and play. As noted by Kanner (1944) in his descriptions of a group of eleven children that he identified as "autistic," several demonstrated unusual or limited play skills. For example, Donald was "constantly happy and busy entertaining himself, but resented being urged to play with certain things. Most of his actions were repetitions carried out in exactly the same way in which they had been performed originally. If he spun a block, he must always start with the same face uppermost" (218).

Alfred, at three and a half years, "spotted a train in the toy cabinet, took it out, and connected and disconnected the cars in a slow, monotonous man-

ner. He kept saying many times, ‘More train—more train—more train.’ He repeatedly counted the windows. He could not in any way be distracted from the trains” (234).

In his description of Elaine, Kanner noted her tendency to play alone—and for long periods of time. “Elaine was very restless but when allowed to look at pictures, play alone with blocks, draw or string beads, she could entertain herself contentedly for hours” (240). Thus, Kanner observed that the children had more intense, repetitive interactions with objects that seemingly caught their attention than did the people around them. Their play skills generally lacked pretend qualities, and they rarely engaged in social play with others. Indeed, they actively pushed people away from their focus on objects.

Delay or Difference in Play?

Since Kanner’s original descriptions of children with autism, there have been many studies of their play behaviors. It remains unclear, however, whether the play skills of children with autism develop more slowly or differently than those of other children or whether the limitations we find in the abilities of children with autism to play are due to other factors such the repetitive, overly focused attention Kanner noted they pay to objects.

Several things hamper our attempts to consider the underlying mechanisms of symbolic play in children with autism. First, most young children are much more likely to show functional play acts than symbolic play acts (Mundy et al. 1986; Sigman and Ungerer 1984). Researchers define functional play as using toys the way they were intended—rolling a toy truck into a toy garage, for example. They define symbolic play as play that involves pretense, as when a child pretends a block is a hat, or gives “life” to a doll by having it make dinner. Indeed, much written about the functional play of children with autism involves a debate about whether these skills are preserved in development. Consider, for example, the studies that show the problems children with autism experience with such play disappear when they are compared to typical children of the same mental age (Charman and Baron-Cohen 1997).

For children with autism, symbolic play skills appear to be different from the play skills of other children in addition to being delayed in their development. Although the functional skills of children with autism may appear later in their development, symbolic play may not appear at all, or it may appear

with extremely low frequencies or with limited diversity (Jarrold, Boucher, and Smith 1996). Thus, symbolic play skills, more so than functional ones, are considered a core developmental impairment for children with autism. For example, researchers note that children with autism, especially when allowed unstructured play or left on their own, initiate only a limited amount of spontaneous pretend play (Riguet et al. 1981; Rutherford et al. 2007; Ungerer and Sigman 1981). Although in typically developing children, symbolic play emerges as they master higher levels of functional play, children with autism have much greater difficulty making the shift from functional to symbolic play. The transition to symbolic play may constitute a particularly difficult roadblock for such children even when they engage in functional play well beyond what we might expect given their cognitive abilities (Goods, Gulsrud, and Kasari, forthcoming).

Alternatively, perhaps the difficulties children with autism experience relate to performance problems rather than to competence. Studies find that when children with autism receive prompts to perform, they engage in the same level of pretend play as typically developing children at the same developmental level (Charman and Baron-Cohen 1997; Jarrold et al. 1996; Lewis and Boucher 1995; Rutherford et al., 2007). However, studies have reported that children with autism might be using the items logically (in pretend fashion but not truly using pretense), a qualitative difference from typically developing children (Charman and Baron-Cohen 1997; Jarrold 2003). Thus, children with autism might figure out how to use the limited items available to them in ways that are “expected pretend acts.” It may be tricky to determine the difference between performance and competence. However, we might argue that, if pretending requires play to be fun, creative, and spontaneous, children with autism are not truly playing with pretense. For example, Hobson and her colleagues (2012) applied a rating of “playfulness” (which included self-awareness, creativity in play, and fun as demonstrated by positive affect and pleasure) to children’s symbolic play acts in a standardized assessment of play skills. They found that children with autism performed the “mechanics” of play (they could show the play act) similar to other children at the same language age but that they were less invested in “playful pretense.”

From these studies, we surmise that symbolic and pretend play emerge slowly if at all in children with autism and that, for many of them, pretend play is also different from what it is for their typically developing peers, it lacks the qualitative indicators of fun and enjoyment. Whether children with autism are engaging in pretend play despite the absence of some elements that define it

constitutes an important question for future research. We may ask: Are the differences noted in the pretend play of children with autism an issue of competence (they do not possess pretend qualities in their play) or performance (they understand pretend play and can engage in it but they rarely do)?

Finally, other characteristics of the play of children with autism suggest that something else may be interfering with the development of their play skills. Some qualitative differences that may interfere include an intense visual scrutiny of toys or their treating toys in unusual ways, such as twisting and spinning them over and over, smelling them, and other unusual behaviors. These actions with objects may be pleasurable to the child, but they may also interfere with more functionally appropriate play and, ultimately, with creative pretense.

Associations of Play to Other Domains of Development (and Vice Versa)

As noted by Lillard and her coauthors, the typical play literature consists of largely correlational and experimental studies with a number of methodological limitations that confound researchers' ability to demonstrate a causal link between play and other child development. The same is true of the body of play literature in the field of autism. It associates play skills with other developmental outcomes both concurrently and longitudinally (Mundy et al. 1986; Sigman and Ungerer 1984). For example, Kasari and her colleagues (2012) connected higher play levels at ages three and four with better language outcomes at ages eight and nine years, but they associated greater flexibility in play acts (demonstrating several different play acts within a level of play, such as having a doll drive the car, wash a car, and park a car) with higher cognitive skills at ages eight and nine. These correlational studies cannot determine whether the development of symbolic play causes later development, but the significant associations beseech us to study the subject further.

Those who research autism focus more often on the impact of earlier developing skills on the development of pretend play, especially because pretend play deficits are often included in the diagnostic criteria of autism. Because joint attention skills like the protodeclarative gestures of pointing to share, showing, and coordinated joint looking (Mundy et al. 1986) occur in a child's development before pretend play, perhaps impairments in pretend play are the downstream effect of early deficits in joint attention. Although this notion has been the topic

of some study, researchers have not yet found a clear causal link (Charman et al. 2000; Leslie 1987; Mundy and Sigman 1989).

The relationship of earlier developing skills to later development becomes important when we choose targets for intervention. If joint attention does affect the emergence of pretend play, we would target joint attention first in intervention. Similarly, if pretend play aids in the development of language skills, then we would want to target pretend play before working on language development.

Interventions in Play

For most children with autism, we may need to intervene to help them develop both their play skills and their social play (play that includes a social partner and playing together with the same object).

Three issues arise from the current literature on play interventions in autism. The first concerns the methodological approaches we use to evaluate play interventions. Although randomized controlled trials of high methodological quality (e.g., blinded assessors and fidelity of treatment) are becoming more common, few randomized trials directly target pretend play or measure play as an outcome of the treatment. Intervention studies of children with autism are still dominated by single-subject methodologies. Single-subject designs are those that involve only a few children (typically three), collect data frequently over time, and use visual inspection of data to interpret the significance of the intervention. There are obvious limitations to this research approach, including the small samples and the limited ability to evaluate the long-term meaning of change (Kasari and Smith 2013). Additionally, the outcomes rarely measure a domain of development (e.g., pretense) but, instead, just a single skill (e.g., toy substitution in play).

A second significant issue concerns the way researchers interpret play, for example, in studies that target the exploration of play materials (Barry and Burlew 2004; Hume and Odom 2007) or that reinforce “independent play” by asking children to complete a puzzle or some other discrete task. Although children certainly need to entertain themselves independently for short periods of time, the problem for many children with autism is exactly opposite—they have not had enough adult support to shape and reinforce their skills. Similarly, their limited play experiences with others also decrease their exposure and skill development in social play.

Other intervention studies may focus on teaching pretense when children with autism are not developmentally ready to pretend. In other words, it is not clear that one can teach a behavior (e.g., the block represents a hat for the doll) without the child's ability to suspend reality. Most developmental researchers view play as a hierarchy of skills that build upon each other with functional play skills emerging prior to symbolic play skills (Lifter et al. 1993). For children with minimal play skills, it is developmentally appropriate to teach a foundation of functional play skills—combination play skills, for example—prior to targeting symbolic acts. Developmental play level refers to the sequence of play skills characteristic of typically developing children (Lifter et al. 1993), beginning with levels of functional play. These levels include simple actions on objects, such as pushing a car; construction or combination play, such as building with blocks; and actions extended towards oneself and figures, such as feeding oneself or feeding a doll. Once this foundation of functional play has been established, symbolic skills are the next level of play to emerge. At the symbolic level, children begin to pretend that objects are something other than they appear (e.g., they pretend a block is doughnut), and they give figures life (e.g., they make a doll walk to its bed and go to sleep). Also at this level, children take on pretend roles that are conventional (e.g., mom and dad) and thematic (e.g., Batman and Robin). Given the delays and differences in the development of children with autism, researchers must pay careful attention to the child's developmental readiness to learn new skills.

Researchers also have to attend to other qualities of the play repertoire in children with autism unlike those in typical development. These include repetitive actions on objects and solitary play. Thus, the target of play can be different for studies on children with autism. Some of the studies focus on what children with autism are missing developmentally (e.g., symbolic play), and others examine the qualities of the play (e.g., repetitive behaviors or lack of engagement with objects and people). In general, we have paid insufficient attention in our studies of children with autism to the affective qualities of play (enjoyment in play, motivation to play with others). Future studies should focus on this area as it relates to the development of play skills.

A third issue plaguing autism play interventions centers on teaching methods. Most studies that focus on teaching play skills use an adult-directed teaching approach anchored in applied behavior analysis (ABA). Therapists using strategies grounded in ABA employ a series of prompts and reinforcements to help children "learn" to play, and the therapy is often conducted in a one-on-one,

adult-to-child setting. A newer approach based in ABA involves video modeling in which children watch instructional videos about how to play with specific sets of toys, and they are then prompted to reenact what they see in the videos. Generally the outcomes of video modeling studies are emblematic of those using the adult-directed teaching methods. Frequently, they show that children with autism increase both functional and symbolic play skills, but only about half of the studies provide evidence that children generalize these learned play skills to novel toys and settings (Boudreau and D'Entremont 2010; Hine and Wolery 2006; Nikopoulos and Keenan 2007; Sancho et al. 2010). As MacDonald, Garrigan, and Vangala (2005) note, although children with autism can increase their "scripted play acts" (rote acts that are reenacted), they fail to develop spontaneous play acts. Given the degree of adult direction in these play interventions and the often work-like approach used to teach play, we are not surprised that most studies find limited maintenance and generalization of play skills (Kasari and Chang forthcoming). This teaching approach, which treats play as work or as tasks, may inhibit creativity, flexibility, and pretense in the play of children with autism. Indeed, there has been a lack of focus on generativity and playfulness in play interventions.

Interventions using "naturalistic" methods may prove more effective in improving play outcomes for children with autism. In particular, Kasari and colleagues have developed a modularized social-communication intervention that uses the child's current play level as a context for improving social-communication core deficits. The intervention focuses on identifying the child's developmental play level and engaging at this play level to decrease the cognitive demands of play within the interaction. The interventionist then facilitates higher levels of play as children demonstrate mastery of earlier developmental play levels. Interventionists encourage children to lead the interaction with their own play ideas. These ideas are then supported by the adult with prompting, when necessary, to expand the child's diversity of play skills and increase longer dyadic play periods. The efficacy of this intervention in multiple, rigorous, randomized, controlled trials resulted in increased play diversity (i.e., a greater range of different play acts) and higher play level in children with autism relative to controls (Kasari et al. 2006; Kasari et al. 2008; Kasari et al. 2010; Kasari et al. 2012).

Interventions targeting play skills in children with autism may yield important information for the study of play in all children. Closely measuring the play abilities (competence) of children with autism and their performance when

alone and when playing with others—along with determining how far interventions can go in improving the pretend play skills of children with autism—may provide important information about what is necessary and sufficient in the development of children’s play.

Conclusions

Similar to studies of typical children as summarized by Lillard and her colleagues, more occurrences of symbolic play are associated with concurrent and later cognitive and language outcomes. Yet, the play of children with autism very often lacks symbolic or pretend qualities. Given the dissociation of early developmental skills in children with autism, understanding how pretend play unfolds in these children necessitates the study of other social and communicative behaviors that likely travel along with the development of play skills. These developmental skills (e.g., joint attention) appear to contribute to the formation of an early social communicative representational system of which pretend play is one component (Charman et al. 2000). There is a need for more rigorous tests of children’s ability to pretend to determine the place of pretending in their overall development. Play interventions may prove critical to later developmental outcomes including later language, cognitive, and social abilities, particularly for some children with autism. This information could also yield clues about the importance of play generally, and pretend play specifically, in the development of all children.

REFERENCES

- Barry, Leasha M., and Suzanne B. Burlew. 2004. “Using Social Stories to Teach Choice and Play Skills to Children with Autism.” *Focus on Autism and Other Developmental Disabilities* 19:45–51.
- Boudreau, Elyse, and Barbara D’Entremont. 2010. “Improving the Pretend Play Skills of Preschoolers with Autism Spectrum Disorders: The Effects of Video Modeling.” *Journal of Developmental and Physical Disabilities* 22:415–31.
- Centers for Disease Control and Prevention. 2012 “Prevalence of Autism Spectrum Disorders-Autism and Developmental Disabilities Monitoring Network, 14 sites, United States, 2008.” *MMWR* 61 (No. SS 3):1–19.

- Charman, Tony, and Simon Baron-Cohen. 1997. "Brief Report: Prompted Pretend Play in Autism." *Journal of Autism and Developmental Disorders* 27:325–32.
- Charman, Tony, Simon Baron-Cohen, John Swettenham, Gillian Baird, Antony Cox, and Auriol Drew. 2000. "Testing Joint Attention, Imitation, and Play as Infancy Precursors to Language and Theory of Mind." *Cognitive Development* 15:481–98.
- Goods, Kelly, Amanda C. Gulsrud, and Connie Kasari. Forthcoming. "Functional and Symbolic Play in Two-Year-Olds with Autism."
- Hine, Jeffrey F., and Mark Wolery. 2006. "Using Point-of-View Video Modeling to Teach Play to Preschoolers with Autism." *Topics in Early Childhood Special Education* 26:83–93.
- Hobson, Jessica A., R. Peter Hobson, Supriya Malik, Kyratso Bargiota, and Susana Caló. 2013. "The Relation between Social Engagement and Pretend Play in Autism." *British Journal of Developmental Psychology* 31:114–27.
- Hume, Kara, and Sam Odom. 2007. "Effects of an Individual Work System on the Independent Functioning of Students with Autism." *Journal of Autism and Developmental Disorders* 37:1166–80.
- Jarrold, Christopher. 2003. "A Review of Research into Pretend Play in Autism." *Autism* 7:379–90.
- Jarrold, Christopher, Jill Boucher, and Peter K. Smith. 1996. "Generativity Deficits in Pretend Play in Autism." *British Journal of Developmental Psychology* 14:275–300.
- Kanner, Leo. 1943. "Autistic Disturbances of Affective Contact." *Nervous Child* 2:217–50.
- Kasari, Connie, and Ya-Chih Chang. Forthcoming. "Play Development in Children with Autism Spectrum Disorders: Skills, Object Play, and Interventions."
- Kasari, Connie, Stephanny Freeman, and Tanya Paparella. 2006. "Joint Attention and Symbolic Play in Young Children with Autism: A Randomized Controlled Intervention Study." *Journal of Child Psychology and Psychiatry* 47:611–20.
- Kasari, Connie, Amanda C. Gulsrud, Stephanny Freeman, Tanya Paparella, and Gerhard Helleman. 2012. "Longitudinal Follow-up of Children with Autism Receiving Targeted Interventions on Joint Attention and Play." *Journal of the American Academy of Child and Adolescent Psychiatry* 51:487–95.
- Kasari, Connie, Amanda C. Gulsrud, Connie Wong, Susan Kwon, and Jill Locke. 2010. "Randomized Controlled Caregiver Mediated Joint Engagement Intervention for Toddlers with Autism." *Journal of Autism and Developmental Disorders* 40:1045–56.
- Kasari, Connie, Tanya Paparella, Stephanny Freeman, and Laudan B. Jahromi. 2008. "Language Outcome in Autism: Randomized Comparison of Joint Attention and Play Interventions." *Journal of Consulting and Clinical Psychology* 76:125–37.
- Kasari, Connie, and Tristram Smith. 2013. "Interventions in Schools for Children with Autism Spectrum Disorder: Methods and Recommendations." *Autism* 17:254–67.
- Leslie, Alan M. 1987. "Pretense and Representation: The Origins of 'Theory of Mind.'" *Psychological Review* 94:412–26.
- Lewis, Vicky, and Jill Boucher. 1995. "Generativity in the Play of Young People with Autism." *Journal of Autism and Developmental Disorders* 25:105–21.
- Lifter, Karin, Beth Sulzer-Azaroff, Stephen R. Anderson, Glynnis Edwards Cowdery. 1993.

- “Teaching Play Activities to Preschool Children with Disabilities: The Importance of Developmental Considerations.” *Journal of Early Intervention* 17:139–59.
- Lillard, Angeline S., Matthew D. Lerner, Emily J. Hopkins, Rebecca A. Dore, Eric D. Smith, and Carolyn M. Palmquist. 2013. “The Impact of Pretend Play on Children’s Development: A Review of the Evidence.” *Psychological Bulletin* 139:1–34.
- MacDonald, Rebecca, Michelle Clark, Elizabeth Garrigan, and Madhuri Vangala. 2005. “Using Video Modeling to Teach Pretend Play to Children with Autism.” *Behavioral Interventions* 20:225–38.
- Mundy, Peter, and Marian Sigman. 1989. “The Theoretical Implications of Joint-Attention Deficits in Autism.” *Development and Psychopathology* 1:173–83.
- Mundy, Peter, Marian Sigman, Judy Ungerer, and Tracy Sherman. 1986. “Defining the Social Deficits of Autism: The Contribution of Non-verbal Communication Measures.” *Journal of Child Psychology and Psychiatry* 27:657–69.
- Nikopoulos, Christos K., and Mickey Keenan. 2007. “Using Video Modeling to Teach Complex Social Sequences to Children with Autism.” *Journal of Autism and Developmental Disorder* 37:678–93.
- Riguet, Candace B., Nancy D. Taylor, Sigmund Benaroya, and Leslie S. Klein. 1982. “Symbolic Play in Autistic, Down’s, and Normal Children of Equivalent Mental Age.” *Journal of Autism and Developmental Disorders* 11:439–48.
- Rutherford, Mel D., Gregory S. Young, Susan Hepburn, and Sally J. Rogers. 2007. “A Longitudinal Study of Pretend Play in Autism.” *Journal of Autism and Developmental Disorders* 37:1024–39.
- Sancho, Kimberly, Tina M. Sidener, Sharon Reeve, and David W. Sidener. 2010. “Two Variations of Video Modeling Interventions for Teaching Play Skills to Children with Autism.” *Education and Treatment of Children* 33:421–42.
- Sigman, Marian, and Ellen Ruskin. 1999. “Social Competence in Children with Autism, Down Syndrome, and Other Developmental Delays: A Longitudinal Study.” *Mono-graphs of the Society for Research in Child Development* 64.
- Sigman, Marian, and Judy A. Ungerer. 1984. “Cognitive and Language Skills in Autistic, Mentally Retarded, and Normal Children.” *Developmental Psychology* 20:293–302.
- Ungerer, Judy A., and Marian Sigman. 1981. “Symbolic Play and Language Comprehension in Autistic Children.” *Journal of the American Academy of Child Psychiatry* 20:318–37.