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Pretending to Play or Playing to Pretend:

The Case of Autism

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Abstract

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. They 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. In this article, 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. They 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 disorders (ASD). In this article, we respond to several specific points that Lillard and her colleagues raise to find what 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 nonliterality with toys. By its very nature, pretend play is not rigid, and it cannot be demanded by others or approached as a task to be done. 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, Vygotsky argues that pretending causes children to think more abstractly. Second, 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 call it 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, 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 symbolic and pretend play) in children with autism, addressing four issues related to the review of pretend play by the Lillard article 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 the prerequisite development of such abilities that occur 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 (Center for Disease Control, 2012). We see early developing core deficits in prelinguistic communicative abilities (e.g., joint attention) and play. As noted by Kanner (1944) in his descriptions of a group of eleven children, he identified as “autistic” several of the children who 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 manner. 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). We define functional play as using toys the way they were intended—rolling a toy truck into a toy garage, for example. We use the term symbolic play to refer to play that involves pretense, as when a child pretends a block is a hat, or gives “life” to a doll by having it make the dinner. Indeed, much written about the functional play of children with autism involves a debate about whether child development preserves such skills. 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 beyond a mere delay 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 in (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 moving 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 and development (Goods, Gulsrud, and Kasari, forthcoming).

We might look at it another way. Perhaps the difficulties children with autism experience relate to performance problems rather than to mental 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, by using their best guesses, 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 enjoyable, 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, lacking 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 don’t 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, such as qualitative differences in play including their intense scrutiny of toys (such as close visual inspection) 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's article, 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 they do demonstrate 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 help create early deficits in joint attention. Although this notion has been the topic of some study, researchers have not so far 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 wish to target joint attention first in intervention. Similarly, if pretend play aids 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, single-subject methodologies still dominate the autism intervention field. Many randomized trials do not directly target pretend play or measure play as an outcome of the treatment. 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 in its outcomes (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 concern attends 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 as in, again, the Hume and Odom study. 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 in shaping and reinforcing 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—simple 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 acts. These include simple actions on objects, such as pushing a car; construction or combination, 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). At this level, too, children take on pretend roles that are conventional (e.g., mom and dad) and fantastic (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 often 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 is 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 play skill development.

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 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 to ABA teaching 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 to be completed, 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 playing at this play level to decrease the cognitive demands of the interaction. The intervention proceeds to higher levels of play as children demonstrate mastery of earlier developmental levels of play. Interventionists encourage children to lead the interaction with their own play ideas. These ideas are then supported with prompting when necessary by the adult to expand the child’s diversity of play skills and increase longer dyadic play periods. We have examined the efficacy of this intervention in multiple, rigorous, randomized, controlled trials that 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 on 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 pretend play in these children—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.

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