## **Guest Editors' Foreword** Probing Play: What Does the Research Show?

FROM THE ANCIENTS to well-known thinkers in the Western canon, play has been touted as essential to what makes us human and to children's well-being. Many people can recall playtimes when they jumped farther than they thought they could, created a make-believe cave world under their covers, or eagerly learned their multiplication tables in school because a stopwatch and a classmate made it playful. Although we all enjoyed play as children, and believe we can identify it when it happens (Smith and Vollsedt 1985), play nevertheless remains a broad construct difficult to define (Burghardt 2011). Most definitions attribute to play an element of fantasy, the "what-if" that allows children to imagine things as they might be, free from reality. Yet some play, like board games and much physical play, also includes nonfantastical activities. Another element of play is enjoyment. Although children need not be laughing or even smiling when they play, they are immersed in it and enthralled by it. Csikszentmihalyi (1997) characterizes this aspect of play as "flow," which has the effect of shutting out surrounding distractions and honing attention. The affect accompanying play may be related to another of its features: play is voluntary, and children need no coaxing to engage in it. Whether children are conjuring "pretend school" with stuffed animals, digging to China with friends, or engaging in sidewalk games with bottle caps, their play allows them to use their imaginations and, paradoxically, as the Russian researcher Lev Vygotsky argued, to "instantiate" the rules of the real world. Play occurs universally (Eibl-Eibesfeldt 1989) among children even in cultures where adults do not explicitly encourage it (Gaskins 2013). Less obviously, play influences children's thinking and reasoning and their emotional and social development.

Although the research on play has been copious, it has not always been consistent. This special issue offers an opportunity to take stock of the research about play's effects in various areas of human development. Peter Smith criticized the field of play for being bound by the "play ethos," the notion that "all play is good." He implored scientists to invoke the same rigor in its examination that other topics receive. Some original studies (e.g., Pellegrini 2011; Hirsh-Pasek et al. 2009), using both correlational and experimental paradigms, have done that. However, a thorough, critical review of the effects of one particular type of play—pretend play—by Lillard et al. (2013) especially fed the impetus for this special issue of the *American Journal of Play*, in which we have sought to examine what we know about play (more broadly) in many different domains.

Our charge to the authors we invited to contribute was five-fold. We asked them to review the theoretical frameworks used in their play domain and to present the evidence supporting those theories. Because strong methodology is essential to good science, we asked them to consider correlational, longitudinal, and experimental studies and to further consider any methodological challenges they faced in their area in coming to grips with evidence of play's possible effects. We also invited them to consider the next research questions that needed answers and possible ways to address them. Finally, we asked them to speculate about the practical implications of the findings in their area for parenting or for education. We hoped the results would be heuristic, spurring further research on this important topic.

We chose experts from around the country well known for their work on play and playful learning. Because of space considerations, we did not invite contributions on the evolution of play, on physical play, on the value of recess, or on a range of other areas of play study. Rather, we sought articles covering a wide variety of cognitive and social-emotional areas and raising urgent theoretical questions. Harris and Jaloul, for example, discuss the issue of play quantity, wondering how much is enough for any possible benefit to accrue. Two articles—one by Berk and Meyers, the other by Bodrova, Germeroth, and Leong—consider the relationship between play and the development of children's self-regulation and executive function capabilities. Both start with Vygotsky's theory, but they end at somewhat different conclusions. Kasari reports on what we know about play in children with autism. Although most developmental specialists used to think that the absence of pretend play was a hallmark of autism, many now view the condition as falling on a continuum, and some of the elements of such play can be observed in these children.

In the cognitive domain, Weisberg, Zosh, Hirsh-Pasek, and Golinkoff consider the ways in which play might promote language development. They describe research using "guided play" (Hirsh-Pasek et al. 2009; Fisher et al. 2011), in which adults' scaffolding of children's language has positive effects. Nicolopolou and Ilgaz consider older children and how the pretend play and narratives that children engage in seem to support their narrative recall and language comprehension. Roskos and Christie, in their contribution, conduct

a critical appraisal of the link between play and literacy. Although this link is "hard to prove" and the evidence is "spotty," they claim that "literacy-enriched play" does promote children's reading and writing. Russ and Wallace evaluate the evidence for the impact of play on creativity—another concept that is difficult to define—and conclude that "converging evidence" does support this relationship. Finally, Gopnik and Walker address the role of play in exploration and problem-solving. For them, "imaginative play is an engine for learning."

Whenever anyone presents a set of articles on any topic in science, they always issue a call for further research, and so it is with this special issue of the *American Journal of Play*. As Nicolopoulou and Ilgaz note, even where there is good evidence for the effects of play, no survey of existing research about its impact should lead to complacency. With them, we say, "There is simply not enough of this research."

—Roberta Michnick Golinkoff, Kathy Hirsh-Pasek, Sandra W. Russ, and Angeline S. Lillard, Guest Editors

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