



Session Abstracts

Friday, April 1st

10:15 AM - 11:45 AM

(Event 49012) Paper Symposium: *Methodological Innovations for Tapping into Free Play in Infants and Children*

The stark contrast between the constraints of laboratory-based paradigms and the free and natural play of young children presents a fascinating challenge: How can we systematically measure play behavior and its underlying processes? In this symposium, we speak to the advantages and challenges of different paradigms and methods for tapping into young children's play. Although we have all recently published results from research on play (e.g., Frija, Billing, et al., 2021; Hashmi et al., 2021; Hashmi, Vanderwert, et al., 2020; Smith et al., 2021), this symposium will focus on the strengths and pitfalls of methodological choices made when collecting data during play. In the first talk, novel observational coding schemes measured seven-year-old children's speech and behavior as they played to investigate whether different forms of play were associated with social understanding. The second talk builds on this behavioral research and leverages the strengths of functional near infrared spectroscopy (fNIRS) to assess neural correlates of pretend play in conjunction with language and social cognition. The third talk focuses in on a particular method that has recently been used with fNIRS during free play in infancy: high-density diffuse optical tomography. The final talk investigated brain activity using electroencephalography (EEG) during spontaneous free play in infants. The diverse range of ages (6 months to 8 years), contexts (parent-child free play, solo play, computer play), and methods (behavioral coding, fNIRS, EEG) used across these four papers will foster rich conversations about the complex decision making required for optimizing data collection in different settings.

(Event 34487) Paper Symposium: *Pretend Play and Learning: Academic Achievement, School-based Programming, and Intervention Approaches*

Pretend play is an essential developmental task that relates to a variety of positive outcomes including academic achievement, problem-solving and coping, creativity, and socioemotional functioning. The focus of this symposium will be on the role of pretend play in learning. School-based outcomes of pretend play and play-based interventions will also be presented. First, longitudinal results examining pretend play at age 4 and academic achievement at age 6 will be presented. This study is novel in that it examines the relationship between pretend play and academic skills longitudinally and at a younger age than previously has been examined in the literature. Second, a study examining pretend play and creativity in the general education setting compared to an immersive bilingual program will be provided. The results of this study suggest that the immersive bilingual language learning environment may facilitate the development of pretend play and creativity, potentially due to the common cognitive skills involved in language learning and pretend play/creativity. Third, a study demonstrating the feasibility of learning pretend play skills through a school-based group intervention for preschool- and school-aged children will be included. In the final presentation, a play-based intervention of parent-child dyads in which the child had ADHD showed preliminary efficacy in improving parental engagement and parent-child interactions. Taken together, this symposium will examine how pretend play relates to children's learning as well as parental learning in the parent-child dyad.



2022 SPECIAL TOPIC MEETING

(Event 4122-1) Paper Session: *Parental Perceptions and Interactions During Play*

Paper 1: *Parental Perceptions of Informal Learning from Digital Devices and Physical Toys*

Paper 2: *Measuring Out-of-school Play: Associations of Ecological Momentary Assessment Measures with Time-Use Diary and Parental Estimates*

Paper 3: *Learning to Play: Features of Parent-Child Interaction and Quality of Later Pretend Play*

Paper 4: *Playful parenting: The role of and barriers to play for parents of young children in humanitarian contexts*

(Event 4122-2) Paper Session: *Exploration and Problem Solving Through Imagination and Play*

Paper 1: *Everyday play in Tajikistan: Infants' object exploration during naturalistic routines and structured tasks*

Paper 2: *Supporting parents to support children's problem solving in a free play museum exhibit.*

Paper 3: *Let the Gains Begin: Exploring Cognitive Development through Parent-Child Pretend Play During COVID-19*

2:30 PM - 4:00 PM

(Event 34435) Paper Symposium: *Digital Play in the Modern Age*

Young children are immersed in a digital environment in which their opportunities for play and communication are frequently mediated by a screen (Common Sense Media, 2017; McClure et al, 2018). Pediatricians and researchers have developed resources to guide families on moderating usage and selecting high-quality media (AAP, 2016; Barr, 2019; Hirsh-Pasek et al., 2016) due to concerns that digital media may displace important opportunities for traditional play and learning. But what does the research say about when digital media is itself the context for play among very young children? Paper 1 presents a rich set of survey data on caregivers' perceptions, habits, and behaviors relating to guiding their child's screen use across age with 50% of parents reporting that they are concerned about time displacement. Paper 2 compares 6- to 12-month-old infants' emotional engagement with mothers via face-to-face, pre-recorded video and contingent video chat interactions while playing peek-a-boo, and reports that similar sensitive interaction styles are effective at engaging babies face-to-face and on video chat. Paper 3 examines triadic joint visual attention (JVA) interactions among infants, parents, and grandparents during the COVID19 pandemic, and reports that video chat can be a high-quality supplement for families at a distance. The discussant will lead the audience in a rich discussion about the pros and cons of play via digital media in the modern age. Collectively, these papers suggest that parents may benefit from evidence-based suggestions about how to use digital media as a context for play and interaction in developmentally appropriate ways.

(Event 48998) Paper Symposium: *Playful Learning Across Low- and Lower-Middle Income Countries and Crisis Contexts: The Role of Fathers, Caregivers, and Teachers*

Play is universal among children and there is a growing body of evidence that it has the potential to transform the global learning crisis. In infancy and through childhood, play builds a strong foundation for later learning by improving brain development and growth (Goldstein, 2012). This panel will focus on recent research and evidence on adult perceptions of play and the interactions that support it as well as



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measurement initiatives of learning through play across contexts. The first paper will set the stage for how play manifests itself in a group of Rohingya refugee children in Cox's Bazar, Bangladesh observed through child point-of-view methods. Results showed a significant presence of parents and community adults in the daily (playful) social interactions of focal children. Suitably, the next two papers – paper 2 and 3 – will present on adult perceptions and reports of play and playful learning. Rohingya refugee fathers' perceptions of play (Paper 2) suggest that fathers acknowledge that structured and unstructured "play" was an important activity in their children's daily lives. Kenyan caregiver and teacher adults (Paper 3) indicated support for their children's engagement during playful learning through positive reinforcement and by encouraging responsibility. Finally, there is an urgent need to improve measurement of playful learning, in order to be able to add to the evidence base on the benefits of play, how playful learning takes place, and how it can be promoted at home and at school across the lifespan. The session will conclude with Paper 4, which will present on measures of learning through play across a 5-country initiative.

(Event 4122-3) Paper Session: *Using and Building Language Skills Through Imagination and Play*

Paper 1: *"What's so funny about that, buster?" Humor and Play in Children's Close Relationships*

Paper 2: *A Play on Words: Music, Drama, and Games Differentially Support Preschoolers' Vocabulary*

Paper 3: *Can technology narrow the early childhood stimulation gap in rural Guatemala? Results from an experimental approach*

Paper 4: *Teachers' Use of Drama Based Strategies at Story Time Contributes to Children's Retell*

(Event 4122-4) Paper Session: *STEM Learning Through Playing*

Paper 1: *Function Goals Support STEM Learning Processes During and After Playful Tinkering*

Paper 2: *Spatial Language Use During Physical Playful Learning Activities Before and During the COVID Pandemic*

Paper 3: *"Can you count the strawberries?": Relations between parent-child math talk, math ability, and home numeracy*

Saturday, April 2nd

10:15 AM - 11:45 AM

(Event 4222-1) Paper Session: *Learning from Stories and Media*

Paper 1: *The Bigger the Character the Smaller the Role: Media Messages about Body Size in Children's Animated Television*

Paper 2: *Social and Emotional Development of Orphaned Children Enrolled in a Storybook Program*

Paper 3: *Math Storybooks and Oral Storytelling: Improving the Numeracy and Storytelling Skills of Students with Disabilities*

(Event 34172) Paper Symposium: *International Uptake of Learning through Play*

Learning through play is increasingly being recognized as an effective approach to children's knowledge and understanding in combination with the development of a broader set of skills for lifelong learning. However, the global significance and successful implementation of learning through play will rely on the broader across age groups, practitioners and contexts.



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This symposium will share and discuss what it will take to address some of the critical barriers for the systemic reach of learning through play at an international level, including new measurements tools, the use of guided play in developing country contexts, and the introduction of teacher professional development models based on learning through play.

The symposium will make use of practical hands-on examples of learning through play to spark the dialogue around how adults can be supported in applying learning through play across international contexts in Ukraine, South Africa, Chile and Tanzania.

(Event 4222-2) Paper Session: *Play and Imagination Interventions for Learning*

Paper 1: *Designing an Intervention to Promote “Playful Parenting”: ChildFund’s Come Play With Me Project in Guatemala*

Paper 2: *Home Learning and Play Environment Characteristics of Young Indigenous Children from Rural Guatemala*

Paper 3: *Translational research on how a community-based intervention can increase parental play and reading*

Paper 4: *Play, Learning, and Resilience in low-income families*

(Event 4222-3) Paper Session: *Relationships between Play and Executive Functions*

Paper 1: *Can a Brief Parenting Intervention Targeting Parent-Child Interaction During Play Improve Behaviour?*

Paper 2: *Pretend-play as a Protective Factor for Developing Executive Functions Among Children Living in Poverty*

Paper 3: *Effects of Parent-Child Play and Children’s Later Inhibitory Control*

2:30 PM - 4:00 PM

(Event 32577) Paper Symposium: *Playful Learning Landscapes: Playing to Learn in Community Settings*

By 2050, over 70% of the world’s children will live in cities (UNICEF, 2012). How can developmental scientists, city planners, and institutions come together to leverage the 80% of children’s time outside of school to benefit their development? One answer is the Playful Learning Landscapes initiative, which marries the learning sciences with urban revitalization to craft carefully planned playful learning experiences that focus on learning outcomes. The transformation of everyday spaces such as supermarkets and bus stops fuels learning without facilitators (Authors, 2018). Playful Learning Landscapes installations placed in high traffic urban environments ensures maximal exposure, aligning with best practice in prevention science (Frieden, 2010). The papers in this symposium detail four projects from a program of research around Playful Learning Landscapes.

Paper 1 reviews promising increases in adult-child conversation and interaction from Urban Thinkscape, a constellation of four playful learning structures designed in collaboration with the community at an urban bus stop. Paper 2 demonstrates how creating a Play-and-Learn space in a library helped support adult-child conversation, interaction, and less smartphone/tablet use. Paper 3 outlines the success of Fraction Ball—a life-size basketball game designed to foster mathematics skills. In Paper 4, results demonstrated that guided play signage in a food pantry increased the quality of the adult-child interaction. Together,



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these papers demonstrate the power and impact of leveraging developmental science to improve children and families' actual day-to-day lives.

(Event 4222-3) Paper Session: *School Factors in Play and Learning*

Paper 1: *Kindergarten Teacher Views on Play-based Learning: Relations with Classroom Structure and Function*

Paper 2: *Imaginative Play in the Classroom: Comparing Teacher Reported Behavior, Classroom Observations and Child Assessments*

Paper 3: *Embodiment during Story Re-telling Supports Character Emotion Recall in Preschoolers*

(Event 4222-4) Paper Session: *The Role of Curiosity and Creativity in Play, Imagination, and Learning*

Paper 1: *Play, Parenting, and Poverty: Associations with Early Childhood Curiosity*

Paper 2: *Designing children's Play Spaces with Contemporary Art*