Millions of young children are diagnosed with developmental disabilities which can profoundly affect their health and functioning. Indeed, approximately 13 percent of children have a developmental disability, ranging from mild disabilities such as some speech and language impairments to serious developmental disabilities, such as intellectual disabilities, cerebral palsy, and autism. An average of 1 in 91 children will be diagnosed with some type of Autism Spectrum Disorder including Asperger's Syndrome.¹ Studies estimate that three to seven percent of school age children suffer from Attention Deficit/Hyperactivity Disorder and the diagnosis of ADHD has increased an average of three percent per year from 1997 to 2006.²

Psychological assessments are pivotal in deciding the type of early intervention a child with special needs will receive. More focused assessment and evaluation of developmental disabilities in young children can inform targeted early intervention strategies for minimizing functional limitations and lifetime disability. When screeners such as pediatricians and teachers identify at risk children, they refer them for further evaluation with the goal to identify strengths and weaknesses that can be targeted for intervention. There are many psychological measures that can be used to assess a child prior to or during preschool. Assessment scales, such as the Affect in Play Scale developed by Dr. Sandra Russ that Dr. Short utilizes in her work highlighted herein, allow researchers and evaluators to broaden the context and content of their assessment to incorporate meaningful child interactions through play.³ This is especially important when assessing children with developmental delays, as traditional diagnostic assessments utilize individualistic approaches which can miss ecological factors in problem behavior and some of the subtle differences between children who have different developmental diagnoses.

Many children with developmental delays are more successful if they receive early intervention at the preschool level. There is some evidence that early intervention for children diagnosed with Autism Spectrum Disorders increases their functionality, especially in cognitive development, self-regulation skills and social communication skills.⁴ A 2006 study showed how early intervention helped to such a degree that more than half the children who received it were not only able to access the general education environment but also succeeded in the curriculum when they got to kindergarten and first grade.⁵ Recognizing that developmental differences impact the ways in which children learn, researchers at Case Western Reserve University are exploring how play-based assessments can provide more detailed information about these children, better identify weaknesses and lead to more targeted early interventions to strengthen social, emotional and cognitive functioning.

THE SCHUBERT CENTER FOR CHILD STUDIES in the College of Arts and Sciences at Case Western Reserve University strives to bridge research, practice and policy and to promote educational initiatives across disciplines. Our focus is on children and childhood from infancy through adolescence and in local, national, international and global contexts. Jill E. Korbin, Ph.D.



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Preschool Assessment: Appreciating Developmental Differences Through Play

Dr. Elizabeth J. Short is professor of psychology at Case Western Reserve University. Trained as a developmental, clinical, and cognitive psychologist, her research has focused on better understanding the processes underlying cognitive development in young children. In her clinical research, she combines static and dynamic assessment techniques to examine the unique academic and social consequences of developmental disabilities, including attention deficit hyperactivity disorder, reading disabilities, specific language delays, and learning disabilities.

Study Design⁶

In an ongoing pilot study with 55 preschool children ages four to seven years with diagnosed Autism Spectrum Disorder (ASD; n=6), Speech Language Impairment (SLI; n=11), Attention-Deficit/Hyperactivity Disorder (ADHD; n=22), combined SLI and ADHD (n=7), and Typicals (n=9), Dr. Short investigated the group differences in symbolic play, functional play, behavior, and language using the Affect in Play Scale (APS) to score videotaped structured-play of the children.⁷ This study examined whether a brief play assessment would be useful for identifying reliable and meaningful differences in play as a function of type of developmental disability. Because of the language, attention, and comfort demands of traditional preschool testing, these tests are very difficult for children with developmental delays to complete. In this research, Short and her colleagues explore how play, as an alternative to standardized measures, may serve as an effective vehicle for assessing independent, emergent, and deficient skills in young children.

Study Results

Standardized measures of cognition, language, and behavior differentiated the groups somewhat. That is, the SLI groups scored more poorly on the nonverbal intelligence tests than the others. Behavioral differences were noted as well, with ADHD more impaired than the rest of the groups. Although few but predictable differences were noted on standardized measures, more dramatic differences were observed using the play assessment. Cognitive aspects of play (i.e., organization, imagination, and comfort) differentiated the children with developmental disabilities, with the ADHD-diagnosed children earning the highest ratings on their cognitive aspects while those diagnosed with ASD received the lowest cognitive ratings. The Typical and ADHD groups showed more affect in their play than either the SLI or ASD groups, with these differences consistent when examining both positive and negative affect. Additionally, the majority of the time spent in play by the ASD group was functional, with symbolic more prominent in the other groups. Marked behavioral differences were noted between the groups (see chart at right).

Findings and Future Directions

Though only the beginning of a larger research project, initial data are promising regarding the utility of a brief play assessment in the identification of cognitive, affective, and behavioral differences among young children. This ongoing study suggests that by using play-based assessment psychologists can discern subtle but significant diagnostic differences between the four groups (ADHD, SLI, ASD and ADHD+SLI). Moreover, compared to more traditional assessments, the APS appears ideally suited as an assessment tool with young children with developmental disabilities because of its brevity (it can be completed in approximately five minutes), ease of administration, standardization, and ease of scoring. Its capacity to provide so much data in such a short time period makes play assessments potentially useful both for initial diagnosis and for ongoing monitoring of intervention effectiveness.

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