

THE IMPORTANCE OF PLAY WITH CHILDREN WITH AUTISM SPECTRUM DISORDER

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Abstract

Play is a fundamental developmental activity that profoundly shapes children's cognitive, social, emotional and neurological growth. For children diagnosed with Autism Spectrum Disorder (ASD), play presents both unique challenges and significant therapeutic opportunities. This article synthesizes current evidence from peer-reviewed research on the nature of play deficits in children with ASD, the neurological underpinnings of play and the spectrum of evidence-based play interventions available to clinicians, educators and families. The article also examines how play affects brain structure, neurotransmitter function and neuroplasticity in children with ASD. To bridge theory and practice, the article incorporates qualitative practitioner perspectives gathered through semi-structured interviews conducted in 2026 with two specialists at Samra Center, a sensory-based child development center in Baku, Azerbaijan. Interview data were analyzed thematically and integrated with the empirical literature to provide applied clinical insight into how evidence-based approaches are implemented in a real-world context. The findings consistently demonstrate that purposeful, individualized and relationship-based play interventions can significantly improve social communication, joint attention, symbolic thinking, motor skills and overall developmental outcomes in children with ASD. The article concludes with recommendations for clinicians, educators and caregivers on designing and implementing effective play-based programs.

Keywords

Autism spectrum disorder, play therapy, peer-mediated intervention, sensory integration, symbolic play, neuroplasticity.

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1. Introduction

Play is universally recognized as the primary occupation of childhood. It is a spontaneous, intrinsically motivated and process-oriented activity through which children explore the world, develop competencies and establish social relationships. As Elbeltagi et al. (2023) describe in their comprehensive narrative review, play is pleasurable physical or mental activity that enhances children's negotiation abilities, problem-solving, manual dexterity, sharing, decision-making and cooperative functioning. Play is not merely a leisure activity; it is the medium through which children construct knowledge and develop identity.

For children with ASD, play is profoundly affected. They frequently exhibit differences in exploratory, functional and symbolic play and demonstrate markedly

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reduced playfulness the internal quality of the play experience characterized by intrinsic motivation, internal control, the ability to suspend reality and social framing. These play deficits are not simply a byproduct of cognitive or language delays; research consistently shows that children with ASD play differently from both typically developing peers and from children with other developmental disabilities who are matched for age, cognitive level and language ability (Westby, 2022).

This article provides a comprehensive review of the importance of play for children with ASD, examining the neurological basis of play, the specific nature of play deficits in ASD and the range of evidence-based interventions that harness the power of play to promote developmental progress. The article draws upon peer-reviewed literature from the fields of pediatrics, occupational therapy, speech-language pathology, psychology and special education and supplements these findings with practitioner perspectives gathered through semi-structured clinical interviews.

1.1. Methodology

This article employs a narrative review methodology, drawing on peer-reviewed literature from pediatrics, occupational therapy, speech-language pathology, psychology and special education. Database searches were conducted across PubMed, PsycINFO and Google Scholar using search terms including autism spectrum disorder, play therapy, symbolic play, JASPER, DIR/Floortime, peer-mediated intervention and sensory integration. Sources were selected based on methodological rigor, relevance to the research questions and recency, with particular emphasis on randomized controlled trials, systematic reviews and meta-analyses where available.

To complement the empirical literature with applied clinical insight, semi-structured interviews were conducted with two specialists at Samra Center, a sensory-based child development center located in Baku, Azerbaijan: Bahar Bayramlı (occupational therapist, psychologist and center director) and Madina Amirli (psychologist specializing in work with children and adolescents). A set of open-ended interview questions was developed around three thematic areas: clinical implementation of play-based interventions, practitioner observations regarding children with ASD and contextual challenges specific to the Azerbaijani clinical landscape. Responses were recorded, transcribed and analyzed thematically. Identified themes were subsequently integrated throughout the article to bridge theoretical frameworks with real-world practice. Informed consent was obtained from both participants prior to the interviews.

2. The neurological basis of play

To appreciate why play is therapeutically powerful for children with ASD, it is essential to understand how play affects the developing brain. Elbeltagi et al. (2023) document that play affects all of the brain's areas, structures and functions, including the prefrontal cortex, limbic structures, cerebellum and both cerebral hemispheres. The prefrontal cortex, considered the brain's executive control center, is particularly responsive to play. Engagement in free play stimulates the development of new neural circuits in the prefrontal area, enhancing executive functions including emotional regulation, problem-solving, impulse inhibition and cognitive flexibility.

At the neurochemical level, play increases dopamine in the substantia nigra and ventral tegmentum, activates norepinephrine to facilitate synaptic learning and reduces cortisol, the primary stress hormone. Simultaneously, play stimulates the production of

brain-derived neurotrophic factor (BDNF) in the amygdala, hippocampus and frontal cortex, supporting neuronal survival and the growth of new synapses. Research with animal models has demonstrated that a single thirty-minute play session can alter the expression of approximately one-third of the 1,200 genes in posterior and frontal cortical regions within one hour, illustrating play's capacity to drive epigenetic change (Elbeltagi *et al.*, 2023).

Play also promotes whole-brain integration, facilitating communication between the right hemisphere's creative and sensory functions and the left hemisphere's logical, analytical and language functions. For children with ASD, who characteristically show disrupted neural connectivity and atypical integration of sensory information, these neurological benefits of play are especially significant. Sensory integration the process by which the brain receives, organizes and responds to sensory inputs is a foundational mechanism through which play promotes cognitive, social, emotional and communication skills.

3. Play deficits in children with autism spectrum disorder

3.1. Exploratory and functional play

Play difficulties in children with ASD emerge very early in development, often detectable within the first year of life. Westby (2022) reviews research showing that infants later diagnosed with ASD demonstrate differences in exploratory play as early as nine months of age, engaging in greater atypical object use such as spinning, unusual visual inspection from odd angles or peripheral vision and reduced purposeful dropping and mouthing of objects. These differences in early object exploration are associated with reduced social engagement three months later and represent an early diagnostic marker of the autism phenotype.

At the level of functional play that is, using toys in their intended manner children with ASD exhibit subtler but important differences. When fine-grained coding systems are applied, preschoolers with ASD demonstrate functional play that is less elaborated, less varied and less integrated than that of typically developing peers, even when matched on developmental level. They are less likely to direct functional play toward themselves or others, suggesting reduced appreciation of both self and other as recipients of play actions and reduced motivation for joint interactive play (Westby, 2022).

3.2. Symbolic and pretend play

The most pronounced and well-documented area of play difficulty in ASD concerns symbolic and pretend play. Westby (2022) summarizes findings showing that even when accounting for cognitive and language levels, children with ASD exhibit far fewer pretend behaviors and those they do produce are less complex, novel and spontaneous. Wing and Gould's (1979) foundational epidemiological research found that a majority of children with ASD in their sample exhibited no symbolic play behaviors whatsoever. More recent studies confirm that children with ASD are most likely to employ simple object substitution when they do engage in symbolic play and are least likely to produce agent play in which a doll or figure becomes the agent of an activity which requires higher-level perspective-taking.

A particularly important finding is that children with ASD appear to have deficits in both the competence and the performance dimensions of pretend play. Even when scaffolded with modeling and instruction, their pretend play remains less frequent, less

novel, more ritualized and less complex than that of typically developing peers. Furthermore, even when they appear to engage in symbolic play, they demonstrate less playfulness less enjoyment, less awareness that they are pretending and less sense of internal control and creative agency during the activity (Westby, 2022).

Clinical experience aligns closely with these research findings. Madina Amirli, a psychologist specializing in work with children and adolescents at Samra Center in Baku, reflects that children with ASD tend to perceive their environment in more concrete terms and that this concreteness is central to understanding their symbolic play difficulties. In her clinical observation, the core challenge of therapeutic work with these children lies in gradually building what she describes as the capacity to recognize that objects and situations can carry different meanings that a spoon can represent a microphone or that a block can serve as a telephone. This view directly corroborates the theoretical literature on weak central coherence and executive function deficits described in the sections that follow.

3.3. Social play and playfulness

Children with ASD struggle significantly with the social dimensions of play. Elbeltagi et al. (2023) describe how children with ASD tend to remain in the earliest forms of solitary play, preferring purposeless, repetitive actions rather than progressing through parallel, associative and cooperative play stages. They have difficulty understanding non-verbal social cues during play, including facial expressions, gestures and vocal tone and face significant challenges in games requiring cooperation, joint decision-making and shared imagination.

The internal experience of play, termed playfulness, is also notably reduced in children with ASD. Research using the Test of Playfulness has shown that severity of ASD symptoms is most closely associated with reduced internal control and reduced framing abilities - the capacity to give and read social cues within a play context. Higher levels of elaborated pretend play with object substitution are positively associated with all dimensions of playfulness, suggesting that interventions targeting pretend play complexity may have broader benefits for the quality of children's overall play experience (Westby, 2022).

4. Theoretical explanations for play differences

Multiple theoretical frameworks have been proposed to explain the distinctive pattern of play deficits observed in children with ASD. Westby (2022) identifies four primary explanatory frameworks: Theory of Mind deficits, executive function deficits, weak central coherence and atypical sociocultural learning.

Theory of Mind the capacity to attribute mental states to oneself and others is considered broadly impaired in ASD. Pretend play fundamentally requires Theory of Mind, as the child must hold two mental representations simultaneously: the real identity of an object and its make-believe identity. Social pretend play, which involves recognizing and coordinating mental states with a play partner, demands particularly sophisticated interpersonal Theory of Mind. Performance on Theory of Mind tasks significantly predicts symbolic play ability in children with ASD.

Executive function deficits in ASD impair the response inhibition, set-shifting and planning behaviors required for pretend play. A child engaging in symbolic play must suppress the prepotent response to an object its real identity and generate an alternative

response its pretend identity precisely the kind of cognitive flexibility that is compromised in ASD. Longitudinal research has shown that executive function at ages three to four years significantly predicts symbolic play at age six in children with ASD.

Weak central coherence the tendency to process information in fragmented, detail-focused ways rather than globally further undermines symbolic play, as children with ASD have difficulty perceiving thematic relationships among toys and social cues in a play context. Finally, reduced participation in social routines and joint interactive experiences limits the social learning opportunities through which play skills are typically acquired, creating a self-reinforcing cycle of play delay.

5. Evidence-based play interventions

5.1. *Child-centered play therapy (CCPT)*

Child-centered play therapy is among the most comprehensively studied play-based interventions for children with ASD. Rooted in humanistic psychology, CCPT is a relationship-based approach in which the therapist enters the child's world, following the child's lead and using the therapeutic relationship as the primary vehicle for change. Elbeltagi et al. (2023) review studies showing that intensive CCPT significantly reduces core ASD symptoms and behavioral difficulties including attention problems, externalizing behaviors and aggression. Research by Novita et al. (2017) found that CCPT effectively improved joint attention skills in children with ASD an outcome of particular developmental significance, as joint attention is foundational for language acquisition and social learning.

CCPT provides children with ASD a safe, permissive environment in which they can express suppressed emotions, experience freedom of choice and develop independence. Because verbal expression is frequently difficult for children with ASD, the play medium allows emotional communication through action and symbol rather than language.

The philosophy underlying CCPT is well captured in the approach described by Bahar Bayramlı, occupational therapist, psychologist and director of Samra Center, who emphasizes that the center is sensory-based and gives great priority to play during sessions, viewing it as one of the most natural and effective ways to enter a child's world. This framing captures the relational essence of CCPT that meaningful therapeutic change begins not with the therapist directing the child, but with the therapist joining the child where they are.

5.2. *DIR/Floortime*

The Developmental, Individual Difference, Relationship-based (DIR) model, developed by Stanley Greenspan and Serena Wieder and its practical application known as Floortime, places play at the center of therapeutic intervention. In DIR/Floortime, therapists and caregivers join the child on the floor, following the child's lead while gradually introducing new elements to extend communication circles and promote development through Greenspan's developmental ladder of functional emotional milestones. Westby (2022) notes that DIR/Floortime is among the naturalistic developmental behavioral interventions that have demonstrated the most promising evidence for a range of outcomes in young children with ASD.

Research reviewed by Elbeltagi et al. (2023) indicates that 25 hours per week of DIR/Floortime for a minimum of two years produces significant overall developmental

gains. Solomon et al. (2007) found that 45.5% of children receiving Floortime-based parental intervention achieved good-to-excellent progress in functional development. Pajareya and Nopmaneejumruslers (2012) demonstrated that 14 hours per week of parent-delivered Floortime for one year produced improvement and decreased autism signs in 47% of children studied.

Bayramlı acknowledges that internationally recognized methods such as DIR/Floortime are present but unevenly distributed in Azerbaijan. In her assessment, the main barriers to wider uptake include insufficient engagement with play therapy as a formal discipline, limited professional training programs and inadequate parent education. This observation points to a structural gap between the availability of evidence-based methods and the infrastructure needed to deliver them at scale a challenge relevant to many emerging clinical contexts globally.

5.3. JASPER: Joint Attention, Symbolic Play, Engagement and Regulation

JASPER is a naturalistic developmental behavioral intervention that directly targets the foundational skills most impaired in ASD: joint attention, symbolic play, engagement and self-regulation. JASPER trains children to focus simultaneously on a toy and a social partner, expanding play diversity, increasing pretending abilities and extending the range of toys used in play. Systematic reviews cited by Elbeltagi et al. (2023) and Westby (2022) confirm that JASPER produces significant improvements in joint child engagement, joint attention, play diversity and language skills.

Westby (2022) emphasizes the clinical importance of JASPER's principle that if play intervention is not calibrated to the child's developmental play level, engagement and joint attention cannot be achieved and dysregulation is likely. This underscores the necessity of comprehensive play assessment prior to intervention design. Goods et al. (2013) demonstrated that 30-minute JASPER sessions twice weekly for 12 weeks produced greater play diversity in preschoolers with ASD, with effects generalizing to classroom behavior.

The JASPER emphasis on joint attention as the gateway to broader development is echoed in Amirli's clinical experience. She observes that children with ASD often avoid togetherness because they have not yet developed the capacity for genuine communication and that the first step is always to create a safe and trusting environment in which they can begin to build communicative connection. In her view, once real togetherness is established, age-appropriate skills can be developed progressively. This account illustrates how JASPER's theoretical foundation that joint attention must precede and scaffold other developmental gains is experienced as a clinical reality in everyday therapeutic work.

5.4. Integrated Play Groups (IPG)

The Integrated Play Groups model is a socially inclusive intervention in which children with ASD play with typically developing peers guided by a trained adult facilitator. The facilitator structures interactions, sets play themes and rules and scaffolds the novice players' participation. Research by Wolfberg et al. (2015) demonstrated that 12 weeks of IPG participation produced significant increases in symbolic and social play, with gains in unsupported play maintained with both familiar and unfamiliar peers. IPG capitalizes on the social learning opportunities available in naturalistic peer interaction, addressing the sociocultural learning gaps that contribute to play deficits in ASD.

5.5. Peer-mediated interventions (PMI)

Peer-mediated interventions train typically developing peers to initiate and support positive play interactions with children with ASD. Kent et al. (2020), in a study involving typically developing peers, demonstrated a significant moderate intervention effect for peers who participated in a PMI for children with ASD. Notably, the study found that peers themselves showed meaningful growth in playfulness and that the children with ASD and their typically developing peers demonstrated a similar pattern of play interaction development, suggesting mutual benefit from well-designed PMIs.

PMIs are particularly valuable because they address play improvement within the natural social contexts in which children spend the majority of their time, promoting generalization of skills to everyday peer interactions. Training peers to use strategies such as commenting on play, offering choices and responding to communicative attempts creates an enriched social environment that supports development across communication, play and social domains.

The clinical value of peer interaction is affirmed by both Samra Center specialists, though with an important qualification. Bayramlı notes that children sometimes accept the behavior and words of peers more readily than those of adults and that play with peers gives the child the chance to see the world from a shared perspective. However, she is also clear that this is not always immediately effective: a child with ASD must first develop adequate self-regulation, because without it, the child will struggle to build and sustain play with a peer. For this reason, she advocates running individual play alongside peer play in parallel. Amirli similarly describes how structured small-group activities can open pathways to peer connection a simple game where children take turns throwing a ball and calling each other's names may appear modest, but in her clinical experience it can open the path to building togetherness, sustaining play and developing turn-taking skills.

5.6. Video self-modeling

Video self-modeling (VSM) is an intervention in which children watch videos of themselves performing targeted skills successfully, providing a self-referential model that capitalizes on observational learning. Lee et al. (2017) employed a single-case multiple probe design to examine the effects of VSM on the functional play skills of a 5-year-old child with ASD across three sets of toys. Their findings demonstrated a clear functional relationship between VSM and increased percentages of functional play actions across all toy sets, with skills maintained one and two weeks after intervention cessation. Preliminary generalization results showed improvement in untrained toys, suggesting that VSM promotes flexible skill transfer. VSM is particularly well-suited for children with ASD because it leverages the visual learning strengths common in this population, provides a clear and unambiguous model for imitation and builds self-efficacy through positive self-observation.

5.7. Sensory integration and physical activity-based play

Sensory integration therapy, grounded in Ayres Sensory Integration theory, uses structured play activities to address atypical sensory processing in children with ASD. Occupational therapists design play environments and activities that systematically engage the tactile, vestibular, proprioceptive, auditory and visual systems, helping children to regulate sensory responses, develop adaptive behaviors and access the social

and cognitive dimensions of play. Elbeltagi et al. (2023) report that sensory integration is evidence-based for supporting the development of children with ASD. Physical activity-based play programs also demonstrate significant benefits. Hassani et al. (2022), in a randomized controlled trial of 30 children with high-functioning ASD, compared the effects of the SPARK and ICPL programs on motor skill development. Both programs produced significant improvements in gross and fine motor skills, with the ICPL program demonstrating superior effects on balance, bilateral coordination, strength and fine motor control. These motor gains are clinically significant because motor skill competence is strongly associated with physical activity participation, social inclusion and academic achievement.

Amirli describes a careful individualized process in her sensory work. The first step is always to determine whether the child is hypersensitive or hyposensitive. Based on this assessment, sessions are structured to introduce sensory experiences gradually, integrating them into play. The child's internal motivation must always be respected; participation must be voluntary and never forced. She also addresses the question of stereotyped behaviors with clinical nuance, observing that cutting off stereotyped behaviors can intensify them and lead to their replacement with other behaviors. Instead, the therapeutic goal is to give meaning to the stereotype through play when a behavior is meaningfully transformed in this way, the stereotypes can diminish over time and the child can learn to manage them.

5.8. Art therapy and equine-partnered play therapy

Art therapy harnesses creative expression to promote communication, social interaction and emotional regulation in children with ASD. Research reviewed by Elbeltagi et al. (2023) indicates that art therapy produces positive therapeutic effects on speech, social relations and unusual behavior and may improve self-image, learning and communicative skills while reducing repetitive and restricted behaviors. Equine-Partnered Play Therapy uses the therapeutic relationship between children and horses to promote social skills, self-regulation and sensory processing. Bass et al. (2009) demonstrated that 12 weeks of therapeutic horseback riding improved sensory seeking, social motivation and reduced inattention and distractibility in children with ASD. Harris and Williams (2017) showed significant reductions in ASD symptom severity and improvements in social functioning following weekly riding sessions. These findings suggest that the rhythmic, multisensory experience of equine interaction may provide a uniquely accessible therapeutic context for children who struggle in conventional social settings.

6. The role of parents and caregivers

Across all evidence-based play interventions, the involvement of parents and caregivers emerges as a critical determinant of outcome. Elbeltagi et al. (2023) document that parental denial or limited awareness of the child's condition reduces the effectiveness of therapy significantly, while early and active parental engagement dramatically improves prognosis. Charlop et al. (2018), in their comprehensive treatment of play and social skills interventions, identify parent-implemented intervention as one of the most powerful evidence-based strategies available, noting that parents who are trained as co-therapists extend therapeutic benefits across all of the child's environments and waking hours.

DIR/Floortime, JASPER, IPG and PMI programs all incorporate structured parent training components, teaching caregivers to follow the child's lead, use positive affect and enthusiasm during play, create natural communication opportunities and respond contingently to the child's communicative attempts. Research consistently shows that when parents are trained in these strategies, outcomes for children are significantly better than those achieved through clinic-based intervention alone. Moreover, parent-mediated play interventions strengthen the parent-child relationship, reduce parental stress and increase parental self-efficacy.

The practitioner experience at Samra Center illuminates both the importance and the complexity of parent engagement. Bayramlı describes encountering a wide range of parental responses in practice. Some parents readily accept that play therapy plays an important role in development, while others initially do not regard it as a serious form of intervention. In early sessions, parents may interpret what they observe as simply playing, without appreciating its therapeutic purpose. Bayramlı notes that this attitude tends to shift as parents witness positive changes in their children a gradual process of building understanding and trust that is itself an important dimension of the therapeutic work.

On the question of how parents can most effectively support their child through play at home, Amirli draws on a principle that is central to both DIR/Floortime and JASPER: the goal of play therapy is for the child to play together with the adult. At home, parents should pay constant attention to preserving togetherness during play, initiate play by taking the child's interests into account and model play behavior even when the child does not initially engage. Children begin to play and learn by imitating play and being the right role model is the healthy starting point for this. On the question of duration, Bayramlı notes that it is not possible to say exactly how long play therapy will take to produce results, because every child is different in some, positive results can be observed within a month, while in others the process may take considerably longer. A long-term and systematic approach is essential and home support and the cooperation between the parent and the specialist are among the fundamental conditions for the child's progress.

7. Assessment of play skills

Effective play intervention depends on accurate and comprehensive assessment of the child's play skills. Westby (2022) describes several validated assessment tools used in clinical practice and research. The Child-Initiated Pretend Play Assessment (ChiPPA) is a norm-referenced standardized assessment of the quality of children's self-initiated pretend play, measuring elaborateness of functional play, ability to use symbols in play and reliance on others for play ideas. The Structured Play Assessment (SPA) captures duration of functional and symbolic play sequences and diversity of play types. The Test of Pretend Play (ToPP) evaluates object substitution, reference to absent objects and attribution of imaginary properties. The Test of Playfulness (ToP) assesses the internal experience of play across 29 items grouped by the dimensions of motivation, control, suspension of reality and framing.

The Westby Playscale (WPS) provides a particularly comprehensive framework for assessing symbolic play development across four dimensions: Theory of Mind and decentration; decontextualization and object substitution; thematic content and organization and integration. The WPS is especially useful for identifying the characteristic uneven profile seen in children with ASD, where performance across symbolic play dimensions is asynchronous. Westby (2022) emphasizes that a comprehensive play assessment is essential before beginning any intervention, as

mismatching intervention to developmental play level leads to dysregulation and failure to achieve engagement.

The clinical measure of progress in therapeutic practice does not always map neatly onto standardized assessment instruments. Amirli's account of what constitutes meaningful progress reflects a developmentally sensitive and clinically grounded framework: she looks first at the child's potential when they began sessions and the skills they have acquired since then. In her view, if the child has begun to establish genuine communication and can carry out even the smallest reciprocal activities, meaningful progress has already been achieved. She also acknowledges that play therapy is not a universal solution and describes how she adapts her approach when it is not the optimal intervention for instance, with a child who has a conduct disorder, where establishing structure and concrete boundaries is more important than play-based approaches, at least in the early stages of work.

8. Challenges and future directions

Despite the robust evidence for the importance of play and the promising findings from multiple play-based interventions, significant challenges remain. Elbeltagi et al. (2023) identify several limitations in the existing literature: many studies have small sample sizes and weak experimental designs that limit generalizability; play therapy is often delivered as part of a comprehensive intervention package, making it difficult to isolate its specific contribution to outcomes and the heterogeneous nature of ASD means that no single play intervention approach will be optimal for all children.

Access and equity are persistent concerns. High-quality, evidence-based play interventions can be costly and time-intensive and their availability varies significantly across geographic, socioeconomic and cultural contexts. Parent training programs, while highly effective, place significant demands on caregivers and cultural attitudes toward professional intervention and the role of play vary considerably across communities.

The specialist perspective from Azerbaijan illuminates these access and equity concerns in a specific national context. Bayramlı identifies professional training as a fundamental structural gap, noting that specialist training in this field is not yet at a sufficient level in Azerbaijan and that this direction is not widely taught in higher education institutions. As a result, practitioners feel the need to seek out additional training and courses on their own initiative. This observation points to a systemic need: the expansion of play-based ASD intervention in developing clinical contexts depends not only on awareness at the individual practitioner level, but on the integration of play therapy methodology into formal professional training curricula.

Technological innovation offers promising new directions. Tele-play therapy, accelerated by the COVID-19 pandemic, has expanded access to play-based services for families in remote or underserved areas. Preliminary research supports the feasibility and effectiveness of digitally delivered parent coaching and play-based therapy. Interactive technology platforms, virtual reality environments and specially designed educational games offer new contexts for structured play that may be particularly motivating for children with ASD. Future research should prioritize longitudinal designs to better understand the sustained effects of play interventions across developmental stages and should invest in identifying which intervention approaches are most effective for specific profiles of children with ASD. Greater attention to the generalization of skills beyond intervention sessions to naturalistic peer play and community settings is needed. The neuroscience of play in ASD represents a particularly exciting frontier, with research on

frontal lobe function and epigenetic mechanisms of play-induced neural change offering the potential to transform our understanding of how play promotes development.

9. Conclusion

Play is not peripheral to the lives and development of children with ASD; it is central. The evidence reviewed in this article demonstrates that play is the medium through which children with ASD can most naturally access therapeutic support for the core developmental challenges of social communication, joint attention, symbolic thinking, emotional regulation, motor development and peer relationships. From child-centered play therapy to DIR/Floortime, JASPER, Integrated Play Groups, peer-mediated interventions, video self-modeling, sensory integration, equine-partnered therapy and physical activity programs, a rich body of evidence-based play interventions has been developed and validated to support children across the autism spectrum.

Critically, the effectiveness of these interventions is maximized when they are individualized to the child's developmental play level, delivered within the context of warm and trusting relationships, supported by trained parents and caregivers and assessed with validated, comprehensive tools. The neurological evidence confirms that play-based interventions do not merely teach isolated skills they reshape the developing brain, promoting neuroplasticity, strengthening neural connectivity and altering gene expression in ways that support lifelong development.

The practitioner perspectives incorporated in this article, drawn from clinicians working in the emerging ASD intervention context of Azerbaijan, underscore a truth that the research literature also affirms: that the art of therapeutic play lies not in technique alone, but in relationship. Progress is visible the moment genuine communication is established when the child begins to engage, to respond and to trust. That moment, however small, is the beginning of everything.

The goal of play-based intervention for children with ASD should be not only developmental progress but joy the restoration and cultivation of the intrinsic pleasure and creative freedom that play represents. When children with ASD are supported to play in ways that are meaningful, relational and genuinely joyful, they are given access to the most powerful developmental tool available to any child. This is both a clinical imperative and a moral one.

References

- Bass, M.M., Duchowny, C.A. & Llabre, M.M. (2009). The effect of therapeutic horseback riding on social functioning in children with autism. *Journal of Autism and Developmental Disorders*, 39(9), 1261-1267. <https://doi.org/10.1007/s10803-009-0734-3>
- Charlop, M.H., Lang, R. & Rispoli, M. (2018). *Play and Social Skills for Children with Autism Spectrum Disorder*. Springer. <https://doi.org/10.1007/978-3-319-72500-0>
- Elbeltagi, R., Al-Beltagi, M., Saeed, N.K. & Alhawamdeh, R. (2023). Play therapy in children with autism: Its role, implications and limitations. *World Journal of Clinical Pediatrics*, 12(1), 1-22. <https://doi.org/10.5409/wjcp.v12.i1.1>
- Goods, K.S., Ishijima, E., Chang, Y.C. & Kasari, C. (2013). Preschool based JASPER intervention in minimally verbal children with autism: Pilot RCT. *Journal of Autism and Developmental Disorders*, 43(5), 1050-1056. <https://doi.org/10.1007/s10803-012-1644-3>
- Harris, A., Williams, J.M. (2017). The impact of a horse riding intervention on the social functioning of children with autism spectrum disorder. *International Journal of*

- Environmental Research and Public Health*, 14(7), 776. <https://doi.org/10.3390/ijerph14070776>
- Hassani, F., Shahrbanian, S., Shahidi, S.H. & Sheikh, M. (2022). Playing games can improve physical performance in children with autism. *International Journal of Developmental Disabilities*, 68(2), 219-226. <https://doi.org/10.1080/20473869.2020.1752995>
- Kasari, C., Freeman, S. & Paparella, T. (2006). Joint attention and symbolic play in young children with autism: A randomized controlled intervention study. *Journal of Child Psychology and Psychiatry*, 47(6), 611-620. <https://doi.org/10.1111/j.1469-7610.2005.01567.x>
- Kent, C., Cordier, R., Joosten, A., Wilkes-Gillan, S. & Bundy, A. (2020). Can we play together? A closer look at the peers of a peer-mediated intervention to improve play in children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 50(8), 2860-2873. <https://doi.org/10.1007/s10803-020-04387-6>
- Lee, S.Y., Lo, Y.Y. & Lo, Y. (2017). Teaching functional play skills to a young child with autism spectrum disorder through video self-modeling. *Journal of Autism and Developmental Disorders*, 47(8), 2295-2306. <https://doi.org/10.1007/s10803-017-3147-8>
- Novita, M., Atmodiwirjo, E. T., & Basaria, D. (2017). The Effectiveness of Child-Centered Play Therapy to Improve Joint Attention Skills in Children with Autism Spectrum Disorder. *The Asian Conference on Education 2017*, Official Conference Proceedings
- Pajareya, K., Nopmaneejumruslers, K. (2012). A one-year prospective follow-up study of a DIR/Floortime parent training intervention for pre-school children with autistic spectrum disorders. *Journal of Medical Association of Thailand*, 95(9), 1184-1193.
- Sandbank, M., Bottema-Beutel, K., Crowley, S., Cassidy, M., Dunham, K., Feldman, J.I., ... & Woynaroski, T.G. (2020). Project AIM: Autism intervention meta-analysis for studies of young children. *Psychological Bulletin*, 146(1), 1. <https://doi.org/10.1037/bul0000215>
- Solomon, R., Necheles, J., Ferch, C. & Bruckman, D. (2007). Pilot study of a parent training program for young children with autism: The PLAY Project Home Consultation program. *Autism*, 11(3), 205-224. <https://doi.org/10.1177/1362361307076842>
- Westby, C. (2022). Playing to pretend or pretending to play: Play in children with autism spectrum disorder. *Seminars in Speech and Language*, 43(4), 331-346. <https://doi.org/10.1055/s-0042-1750348>
- Wing, L., Gould, J. (1979). Severe impairments of social interaction and associated abnormalities in children: Epidemiology and classification. *Journal of Autism and Developmental Disorders*, 9(1), 11-29. <https://doi.org/10.1007/BF01531288>
- Wolfberg, P., DeWitt, M., Young, G.S. & Nguyen, T. (2015). Integrated play groups: Promoting symbolic play and social engagement with typical peers in children with ASD across settings. *Journal of Autism and Developmental Disorders*, 45(3), 830-845. <https://doi.org/10.1007/s10803-014-2245-0>
- Yang, T.R., Wolfberg, P.J., Wu, S.C. & Hwu, P.Y. (2003). Supporting children on the autism spectrum in peer play at home and school: Piloting the integrated play group's model in Taiwan. *Autism*, 7(4), 437-453. <https://doi.org/10.1177/1362361303007004009>

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