

Therapeutic Efficacy of Play Therapy Intervention for Children with ASD

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Abstract

This paper examines the existing research and a case study on the therapeutic efficacy of play therapy interventions for children with Autism Spectrum Disorder (ASD). Play therapy has shown promise as a developmentally appropriate approach to supporting social, emotional, behavioural outcomes in children with ASD. Including enhanced social interaction, improved communication patterns. This research contributes to the growing body of evidence supporting play therapy as an effective intervention for children with highlighting areas requiring further investigation.

Keywords: Autism Spectrum Disorder, Play Therapy, Child Development, Therapeutic Intervention.

Introduction

Autism spectrum disorder (ASD) presents children with persistent challenges in social communication, interaction, and behavioural patterns (American Psychiatric Association, 2013). These difficulties can significantly impact ones overall well-being and development. According to the Indian academy of Paediatrics, an estimated 2.25 million individuals live with ASD. However, experts believe these numbers may be underreported due to limited awareness, stigma, and challenges in accessing diagnostic services, particularly in rural areas.

The diagnosis and management of ASD face unique challenges, including limited specialized healthcare resources, cultural beliefs about developmental disorder, and socioeconomic barriers to accessing early intervention services. The Indian scale for assessment of autism ISAA, developed by the government of India in 2009, serves as a standardised tool for diagnosing ASD in the Indian population, considering cultural and social factors specific to the country.

While various therapeutic interventions are available in urban centres, access to specialised services like play therapy remains concentrated in major cities, creating a significant urban – rural divide in treatment availability. Despite these challenges, there is growing recognition of the importance of early intervention and therapeutic support for children with ASD with play therapy emerging as an approach that can be adapted to diverse cultural and resource settings.

This paper explores play therapy's therapeutic efficacy for children with ASD, through a comprehensive literature review and a case study observed in a clinical setting.

Literature review

While play based interventions are commonly used for children with developmental language (DLD) and autism spectrum disorder (ASD), their impact on mental health outcomes remains unclear. This

systematic review and Meta – analysis by Gill.F (2022), following PRISMA guidelines, examined 2,882 papers, ultimately on children with ASD. Meta – analysis revealed a significant positive mental outcomes (Cohen’s $d = 0.04$, $P = 0.88$). Notable study variations were found in sample sizes, intervention duration, settings, and interventionist background. Importantly, no high – quality addressed children with DLD, highlighting a critical research gap. These finding underscore the need for further investigation into how play – based interventions affect mental health outcomes in both ASD and DLD populations.

Play is an essential childhood activity and therapeutic tool for children with Autism Spectrum Disorders (ASD), making it both an important intervention method and treatment outcome. A study by Kent.C in 2020 of the Ultimate Guide to Play, Language and Friendship (PLF), a peer-mediated intervention for 6-11-year-olds with ASD, examined 68 dyads randomized to either a 10-week treatment or waitlist control group. Results showed significant moderate improvements in play skills that maintained at the 3-month follow-up clinic session and generalized to home settings. These findings provide compelling evidence that the PLF intervention can effectively improve play skills in school-aged children with ASD, supporting its implementation in clinical practice and highlighting the value of peer-mediated approaches in autism intervention.

Children with Autism spectrum disorder face persistent social interaction challenges in mainstream schools, prompting the need for effective interventions. This thesis by Cheng, YFS, (2016) is a mixed methods study evaluated an 8 week Lego therapy program implemented across five mainstream primary schools. The sample included 19 Key Stage 2 children with ASC ($IQ > 70$), 4 typically developing peers, and 6 teaching assistants. Using a quasi-experimental design with three conditions (pure ASC group, mixed ASC/TD group, and control), the study examined intervention effectiveness and implementation factors. While quantitative measures showed no significant effects, thematic analysis of teaching assistant interviews identified valuable insights regarding participant engagement, implementation challenges, and the role of typically developing peers. The findings highlight the importance of considering environmental factors and stakeholder collaboration when implementing social interventions in educational settings.

In a seminal meta-analysis, Dee.R (2005) examined the efficacy of play therapy through 93 controlled outcome studies spanning from 1953 to 2000, addressing longstanding debates among mental health professionals and responding to the U.S public health services call for empirically validated early interventions. The analysis revealed a significant treatment effect of 0.80 standard deviations, with humanistic approaches and parent involvement showing the strongest outcomes. The findings demonstrated that play therapy’s effectiveness was consistent across age, gender, and presenting issues, providing robust empirical support for this developmentally responsive intervention in child mental health services.

Despite play therapy’s widespread use, its empirical foundation has faced consistent scrutiny over the past six decades. A comprehensive meta-analysis by Ray, D (2001) of 94 research studies examined the efficacy of play therapy, filial therapy, and combination as therapeutic interventions. Results demonstrated strong positive treatment outcomes in children, with effectiveness consistent across therapeutic modalities, age, gender, and population type (clinical and non- clinical) setting, and theoretical orientations. The analysis revealed that treatment effectiveness was maximized through parental involvement and an optimal number of sessions. These finding provide substantial empirical validation for play therapy as an evidence – based validation for play as evidence – based intervention

for children.

Case study

A 5 year old boy diagnosed with ASD at age 3, presents with limited verbal communication, poor eye, repetitive behaviours, and sensory sensitivities. Family history indicates neurodevelopmental patterns on both sides.

Initial presentation

- Limited verbal communication (gesture-based)
- Poor eye contact and social engagement
- Restricted play patterns (lining toys, repetitive manipulation)
- Sensory sensitivities (sound/texture)
- Difficulty with transitions
- Limited imaginative play

Play therapy intervention structure

- Twice weekly, 45 minute sessions (8 session's total)
- Child-cantered playroom setting
- Non – directive, child-led approach

Primary Goals

- Enhance social engagement and communication
- Develop imaginative play skills
- Improve emotional regulation
- Foster joint attention

Key strategies

Child – directed play (week 1-2)

- Following child's lead
- Gentle narration
- Observation of play preferences

Sensory Integration (week 2-3)

- Preferred sensory materials (sand, water beads)
- Gentle sensory exploration
- Sensory – based transitions

Social – emotional development (Week 3-4)

- Simple emotion mirroring
 - Basic puppet play
 - Initial turn – taking attempts
- Progress 4 – week period

Week 1

- Explored playroom environment
- Showed preference for sensory materials
- Limited engagement with therapist

Week 2

- Increased tolerance for seated activities (3-4 minutes)
- Brief moments of eye contact during preferred activities
- Began accepting gentle narration

Week 3

- Demonstrated interest in cause-effect toys
- Reduced resistance to transitions with visual supports
- Increased proximity to therapist during play

Week 4

- Emerged single – word approximations during play
- Engaged in parallel play (2-3 minutes)
- Showed interest in puppet interactions

Support Services

- Speech Therapy (weekly)
- Occupational Therapy (weekly)

Initial Recommendations

- Continue twice-weekly play therapy
- Maintain consistent play environment
- Expand sensory play options
- Regular parent consultation

Early Observations

The initial 4-week period shows promising engagement in play therapy, with emerging social interest and early communication attempts. E demonstrates particular responsiveness to sensory-based play and structured environment.

Methodology**Research design**

This study employs a mixed – method approach combining case study observation and literatures review to examine the therapeutic efficacy of play therapy interventions for children with autism spectrum disorder ASD. The design incorporates two detailed case observation over 12 – week period, complemented by a comprehensive review of recent literature (2022 – 2001) on play therapy interventions for ASD and a case study.

Participants

- **Literature Review:** Articles and studies were selected from peer reviewed journals, focusing on ASD and play therapy.
- **Case study:** One child diagnosed with ASD was observed over the course of 4 week play therapy sessions

Materials and tools

- **Literature review:** Academic databases such as APA PsycNet, PubMed and Google scholar were used to collect research articles

- **Case study:** Observational notes were made to assess the child's behaviour and interactions during play therapy

Procedure

- **Literature Review:** A systematic search was conducted using keywords such as "Autism spectrum disorder", "Play therapy", "Therapeutic interventions", and "Child development". Studies were screened and reviewed to synthesize themes related to the effectiveness of play therapy for children with ASD.
- **Case study:** The child attended 8 play therapy sessions, each lasting 45 minutes during each session, unstructured play activities were facilitated by a trained psychologist in a controlled environment.

Ethical considerations

- **Literature Review:** All sources were appropriately cited, ensuring adherence to ethical academic practices
- **Case study:** Confidentiality was maintained by not concealing all identifying information.

Limitations

- **Literature Review:** A significant limitation of the review is that the majority of the studies analysed are based on Western populations, which may limit the applicability of findings to the Indian context. Cultural differences in parenting styles, societal attitudes toward ASD, and accessibility to play therapy interventions could influence the outcomes and relevance of these studies in India.
- **Case Study:** Since only one child was observed, the findings may not be generalizable to other children with ASD. Additionally, individual differences in ASD presentation and therapy responsiveness could limit the applicability of the observations to broader populations

Discussion

The therapeutic efficacy of play therapy interventions for children with Autism spectrum disorder (ASD) represents a complex interplay of clinical outcomes, methodological considerations, and implementation challenges. Recent Meta – analytic findings by Gill.F 2022 demonstrate statistically significant positive outcomes (Cohen's $d = 0.04$, $P = 0.08$), suggesting that play based therapy interventions can effectively support developmental progress in children with ASD. However, the relatively modest effect size warrants careful consideration of both intervention design and implementation factors that may influence therapeutic success.

Examination of longitudinal outcomes provides a compelling evidence for the sustained benefits of structured play interventions. Kent.C's (2020) investigation of the Play, Language and Friendship (PLF) program demonstrated not only immediate improvements in social engagement and play skills but also maintained benefits at three-month follow-up. This maintenance of therapeutic gains, particularly in naturalistic settings, suggests that well-designed play interventions can facilitate meaningful developmental progress beyond the immediate therapeutic context. The generalization of skills to home environments further supports the ecological validity of play-based approaches.

The comprehensive meta-analysis by Dee.R (2005) offers historical validation for play therapy's therapeutic efficacy, reporting a substantial treatment effect of 0.80 standard deviations. Notably, interventions incorporating humanistic approaches and parental involvement demonstrated superior

outcomes, suggesting that the therapeutic framework and delivery context significantly influence intervention success. This finding aligns with contemporary understanding of developmental processes in ASD, emphasizing the importance of naturalistic developmental behavioural interventions (NDBI) that integrate social engagement with skill development.

Clinical evidence from the presented case study illustrates the progressive nature of therapeutic gains through play-based intervention. The documented improvements across multiple domains - from initial limited engagement to emerging verbal communication and parallel play - demonstrate the potential for comprehensive developmental progress through structured play therapy. The weekly progression notes reveal a systematic enhancement in social engagement, communication attempts, and play complexity, supporting the therapeutic value of consistent, developmentally-appropriate intervention.

However, critical analysis of therapeutic efficacy must consider several implementation factors that potentially moderate intervention success. These include the intensity and duration of intervention delivery, therapist qualifications and experience, and the integration of play therapy with other support services. The case study's implementation of twice-weekly sessions, combined with concurrent speech and occupational therapy, suggests that optimal outcomes may require a comprehensive, integrated approach to intervention delivery.

The varying effect sizes reported across studies raise important questions about the factors influencing therapeutic efficacy. These discrepancies might reflect differences in intervention protocols, participant characteristics, or outcome measurement approaches. Understanding these variables is crucial for optimizing intervention design and identifying the most effective therapeutic components for different ASD presentations. The systematic review by Gill.F (2022) highlights the need for more standardized approaches to both intervention delivery and outcome measurement.

Consideration of therapeutic mechanisms suggests that play-based interventions may support development through multiple pathways. The structured progression from child-directed play to social-emotional development, as documented in the case study, indicates that successful interventions must balance child-led exploration with therapeutic guidance. This approach aligns with theoretical understanding of how play supports cognitive, social, and emotional development in children with ASD. Future directions for enhancing therapeutic efficacy should focus on identifying optimal intervention parameters and implementation strategies. This includes determining ideal session frequency and duration, clarifying the role of parental involvement, and establishing guidelines for integrating play therapy with other intervention approaches. Additionally, investigating the relationship between child characteristics and intervention response may help inform more personalized therapeutic approaches.

Conclusion

The current evidence has shown that play therapy interventions can be effective for children diagnosed with Autism spectrum disorder (ASD). These therapeutic approaches have been found to produce positive benefits in promoting developmental skills in children with ASD. Moreover, not only do these interventions encourage immediate improvements, but they also help children maintain and apply these skills in different settings, which are known as generalization. This strong body of evidence highlights the importance of continuing to use and improve upon play therapy methods for young children facing these challenges.

However, to fully harness the benefits of these therapeutic strategies, it is essential to pay close attention to several key elements. The design of the intervention, how it is delivered, and the unique

characteristics of each child all play critical roles in determining the success of the treatment. Recognizing that every child is different means that interventions should be tailored to meet their specific needs. This careful consideration is necessary to maximize the effectiveness of play therapy and ensure that children receive the most benefit from these sessions.

Looking ahead, further research is needed to establish standardized protocols for play-based interventions and to identify which components are most effective. By focusing on these aspects, researchers can enhance the quality and consistency of treatment approaches, leading to even better clinical outcomes for children with ASD. A stronger evidence base will not only support the on-going use of these interventions but will also guide practitioners in making informed decisions that can positively impact the lives of the children they serve.

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