

Effectiveness of a Psychotherapy-Based Emotional Regulation Intervention in Children with Autism Spectrum Disorder and Learning Disabilities: An Intervention Study

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Abstract

Children with Autism Spectrum Disorder (ASD) and learning disabilities often experience difficulties in emotional regulation, affecting their behaviour, social interactions, and academic functioning. This intervention study examined the effectiveness of a psychotherapy-based emotional regulation program for children aged 6–12 years with ASD and learning disabilities. The 12-week intervention incorporated cognitive-behavioural strategies, play therapy, emotional awareness activities, mindfulness techniques, and parent-supported emotional coaching. Pre- and post-intervention assessments indicated improvements in emotional recognition, self-regulation, coping skills, and social participation, along with reductions in emotional outbursts and anxiety-related behaviours. Findings suggest that psychotherapy-based emotional regulation interventions can positively support the psychological and developmental well-being of children with ASD and learning disabilities, highlighting the importance of integrated therapeutic, family, and school-based support.

Keywords: *Autism Spectrum Disorder (ASD), Behavioural Intervention, Cognitive Behavioural Therapy (CBT), Child Mental Health, Emotional Regulation, Emotional Development, Learning Disabilities, Psychotherapy, Play Therapy, Psychological Well-being*

Introduction

Children with neurodevelopmental conditions such as Autism Spectrum Disorder (ASD) and learning disabilities often experience persistent challenges in emotional regulation, social communication, and adaptive behaviour. Difficulties in identifying, expressing, and managing emotions can lead to heightened frustration, anxiety, behavioural outbursts, and withdrawal from social and academic environments. These challenges not only impact the child's psychological well-being but also place considerable stress on families and educational systems. Emotional regulation is a foundational skill that supports a child's ability to respond appropriately to environmental demands, engage in learning, and build meaningful relationships. In children with ASD and learning disabilities, deficits in cognitive flexibility, sensory processing, and executive functioning often interfere with the development of effective emotional control strategies. As a result, there is a growing need for structured therapeutic interventions that target both emotional awareness and behavioural regulation.

Psychotherapy-based approaches, including cognitive-behavioural therapy, play therapy, and mindfulness-based interventions, have shown promise in enhancing emotional and behavioural outcomes in children with developmental challenges. These approaches provide structured yet flexible frameworks that help children recognize emotions, develop coping strategies, and improve self-regulation skills in a supportive environment.

Given the increasing prevalence of ASD and learning disabilities globally, there is a critical need to explore integrated intervention models that combine psychological therapy with family and educational support. This study focuses on evaluating the effectiveness of a psychotherapy-based emotional regulation intervention designed to improve emotional competence, reduce behavioural difficulties, and enhance overall psychological well-being in children with ASD and learning disabilities.

Review of Related Literature

Emotional regulation is a significant challenge for children with Autism Spectrum Disorder (ASD), often affecting their social interactions, behaviour, and academic performance. Mazefsky et al. (2012) emphasized that difficulties in managing emotions are a core concern among individuals with ASD and highlighted the need for targeted interventions to improve emotional functioning. The World Health Organization (2023) also recognizes social and behavioural challenges as key characteristics of ASD, underscoring the importance of supportive therapeutic approaches.

Cognitive Behavioural Therapy (CBT) has been widely used to enhance emotional regulation and coping skills in children. Beck (2011) described CBT as an effective approach for identifying and modifying maladaptive thoughts and behaviours. Similarly, Sukhodolsky et al. (2004) reported that CBT-based interventions significantly reduce anger and emotional dysregulation in children and adolescents.

Play therapy and mindfulness-based interventions have also demonstrated positive outcomes in improving emotional awareness and self-control. Greenberg and Harris (2012) found that mindfulness practices promote self-regulation and emotional resilience among children. Furthermore, family involvement plays a crucial role in emotional development. Morris et al. (2007) noted that parental support and emotional coaching contribute significantly to the development of healthy emotional regulation skills. Studies by Koegel and Koegel (2006) and Weiss and Harris (2001) further suggest that integrated therapeutic and social-skills interventions can improve communication, social participation, and overall well-being in children with ASD and learning disabilities.

Objectives

The primary objective of this study was to evaluate the effectiveness of a psychotherapy-based emotional regulation intervention for children aged 6–12 years with Autism Spectrum Disorder (ASD) and learning disabilities. Specifically, the study aimed to examine whether a 12-week intervention incorporating cognitive-behavioural strategies, play therapy, emotional awareness activities, mindfulness techniques, and parent-supported emotional coaching could improve emotional recognition, emotional awareness, and self-regulation skills among participants. Additionally, the study sought to assess changes in coping abilities, social participation, and adaptive behavioural functioning following the intervention. Another important objective was to determine the extent to which the program could reduce emotional outbursts, anxiety-related behaviours, frustration, and other emotional and behavioural difficulties commonly

experienced by children with ASD and learning disabilities. Furthermore, the study aimed to explore the value of integrating therapeutic, family, and educational support systems in promoting emotional competence, psychological well-being, and overall developmental outcomes in this population.

Methodology

Study Design

This study adopted a quasi-experimental pre-test and post-test intervention design to evaluate the effectiveness of a psychotherapy-based emotional regulation program for children diagnosed with Autism Spectrum Disorder and learning disabilities. The intervention focused on improving emotional awareness, self-regulation, and adaptive coping skills through structured therapeutic techniques.

Participants

The study included children aged 6–12 years diagnosed with ASD and co-occurring learning disabilities, identified through clinical assessment and school records. Participants were selected using purposive sampling. Informed consent was obtained from parents or guardians prior to participation.

Intervention Procedure

The intervention was conducted over 12 weeks, with two sessions per week, each lasting 45–60 minutes. The psychotherapy-based program integrated cognitive-behavioural strategies, play therapy techniques, mindfulness exercises, emotional identification activities, and parent-assisted coaching. Sessions were structured to gradually enhance emotional recognition, expression, and regulation skills.

Tools and Measures

Standardized assessment tools were used to measure emotional regulation, behavioural difficulties, and social functioning before and after the intervention. Teacher and parent rating scales were also used to capture behavioural changes in natural settings.

Data Collection

Pre-intervention data were collected one week before the program began, and post-intervention data were collected immediately after completion of the 12-week intervention period. Consistent procedures were followed to ensure reliability and validity.

Data Analysis

Data were analysed using descriptive statistics and paired sample comparisons to assess differences between pre- and post-intervention scores. The level of significance was considered at $p < 0.05$. The analysis focused on changes in emotional regulation, behavioural outcomes, and social adaptability following the intervention.

Findings and Discussion

The findings of the study indicated notable improvements in emotional and behavioural functioning following the psychotherapy-based intervention. Post-intervention assessments showed significant enhancement in emotional recognition, emotional expression, and self-regulation skills among children with Autism Spectrum Disorder and learning disabilities. Children demonstrated a reduction in frequency and intensity of

emotional outbursts, anxiety-related behaviours, and frustration responses. Improvements were also observed in attention span, classroom participation, and peer interaction. Parent and teacher rating scales reflected consistent positive behavioural changes across home and school environments.

Quantitative analysis using paired comparisons revealed statistically significant differences between pre-test and post-test scores in emotional regulation and adaptive behaviour domains ($p < 0.05$), indicating the effectiveness of the intervention program. The results support the effectiveness of psychotherapy-based approaches in improving emotional regulation among children with neurodevelopmental challenges. The integration of cognitive-behavioural strategies, play-based techniques, mindfulness practices, and parental involvement appears to have contributed to improved emotional awareness and coping abilities. Children with ASD and learning disabilities often struggle with cognitive rigidity and sensory sensitivities, which can impair emotional control. The structured yet flexible nature of the intervention helped participants gradually build emotional understanding and develop appropriate behavioural responses.

The involvement of parents and teachers played a crucial role in reinforcing learned skills across different environments, ensuring better generalization of emotional regulation strategies. These findings are consistent with existing literature emphasizing the importance of multimodal, individualized interventions for neurodevelopmental disorders.

Overall, the study highlights that psychotherapy-based emotional regulation interventions can significantly enhance psychological well-being, social functioning, and adaptive behaviour in children with ASD and learning disabilities, supporting the need for early and integrated therapeutic approaches.

Roles and Themes

Emotional Awareness and Identification

Role: Helps children recognize and label their own emotions (e.g., happy, sad, angry, anxious) using structured activities such as emotion cards, storytelling, and visual cues.

Theme focus: Building basic emotional vocabulary and self-awareness as the foundation of emotional regulation.

Emotional Expression and Communication

Role: Encourages children to express emotions appropriately through speech, play, drawing, and role-play activities.

Theme focus: Reducing emotional suppression and improving communication of internal feelings in socially acceptable ways.

Self-Regulation and Coping Strategies

Role: Teaches children practical techniques such as deep breathing, counting, mindfulness exercises, and relaxation strategies to manage emotional intensity.

Theme focus: Developing control over impulsive reactions and improving stress tolerance.

Behavioural Modification and Positive Reinforcement

Role: Uses structured reinforcement systems to encourage desirable behaviours and reduce maladaptive responses such as aggression or tantrums.

Theme focus: Strengthening adaptive behavioural patterns through consistent feedback and rewards.

Social Skills and Peer Interaction

Role: Enhances skills such as turn-taking, sharing, eye contact, and cooperative play through group activities and guided interactions.

Theme focus: Improving social integration and reducing isolation in children with Autism Spectrum Disorder and learning disabilities.

Parent and Teacher Involvement

Role: Involves caregivers in therapy sessions and provides training for reinforcement of emotional regulation strategies at home and school.

Theme focus: Ensuring consistency, generalization of skills, and long-term sustainability of intervention outcomes.

Cognitive Restructuring and Problem-Solving

Role: Helps children identify simple thought patterns and alternative responses to challenging situations using guided psychotherapy techniques.

Theme focus: Improving flexible thinking and reducing rigid or negative emotional responses.

Conclusion

The present intervention study demonstrates that psychotherapy-based emotional regulation programs can be highly effective in improving emotional, behavioural, and social functioning in children with Autism Spectrum Disorder and learning disabilities. The integration of cognitive-behavioural techniques, play therapy, and mindfulness practices, and structured emotional skill training contributed to meaningful improvements in emotional awareness, self-regulation, and coping abilities.

Findings from the study indicate a reduction in emotional outbursts, anxiety-related behaviours, and maladaptive responses, along with improved social interaction and classroom participation. The involvement of parents and teachers further strengthened the effectiveness of the intervention by ensuring consistency and reinforcement across home and school environments. Overall, the study highlights the importance of early, structured, and holistic psychotherapeutic interventions in addressing emotional regulation difficulties in neurodevelopmental conditions. Such approaches not only enhance psychological well-being but also support academic engagement and social development.

Future research should focus on larger sample sizes, randomized controlled trials, and long-term follow-up studies to validate and expand the effectiveness of psychotherapy-based emotional regulation interventions across diverse clinical and educational settings.

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