

Effectiveness of Psychological Interventions on Communication Challenges amongst Typically Developing Siblings of Children with Autism Spectrum Disorder: A Systematic Review and SWiM Analysis

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Abstract

Autism spectrum disorder (ASD) is a neurodevelopmental condition characterised by difficulties in social communication and interaction. Its effects extend beyond the individual, influencing family dynamics and the wellbeing of typically developing siblings. The typically developing siblings frequently encounter unique challenges including social communication barriers, social isolation, perceived stigma, and emotional strain shaped by the family environment. While research has extensively explored parental adjustment and sibling dynamics in families with ASD, there remains a limited understanding of the broader communication difficulties faced by siblings and the impact of targeted psychological interventions. This systematic review aimed to synthesise current evidence on effectiveness of interventions designed to enhance communication outcomes in neurotypical siblings of children with ASD.

This review followed the Preferred Reporting Items for Systematic Reviews. Six databases searched from 1980 to July 2025 initially yielded 3,021 records. After rigorous screening against predefined criteria, 11 studies were included for analysis. Participant's age ranged from 8 to 24 years and interventions ranged from 2 hours sessions for 10 weeks to 5 sessions in one day. The interventions examined encompassed cognitive-behavioural therapy (CBT) (n=4), psychoeducational programs (n=5), and peer-led support groups (n=6). Outcomes assessed included coping skills, emotional regulation, social engagement, disorder-related knowledge, sibling relationships, and overall communication competence.

Heterogeneity in study design, sample sizes, and outcome measures restricted cross-study comparability and a meta-analysis was not feasible. A synthesis of the results was conducted following the Synthesis without Meta-Analysis (SWiM) guidelines. Interventions contributed to improved emotional regulation, coping strategies, and greater knowledge of ASD, with moderate improvements in communication and sibling relationships. CBT-based and psychoeducational approaches such as knowledge about autism with emotional support, and coping strategies were particularly effective in reducing behavioural and emotional difficulties, while peer support components enhanced group cohesion and reduced isolation.

The review highlights the potential of sibling-focused psychological interventions in fostering resilience for emotional distress, maladaptive coping, and social isolation, enhancing family communication, and reducing stigma. It also emphasises the need for further high-quality, controlled studies employing standardized assessment tools to strengthen the evidence base and support inclusive, family-centred care in ASD contexts

Keywords

Autism spectrum disorder, typically developing siblings, interpersonal and intrapersonal communication, psychological interventions.