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Social-Emotional Learning Interventions in Special Education

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Abstract — Social-emotional learning (SEL) plays a critical role in supporting the development of students in special education settings, where challenges in self-regulation, social interaction, and adaptive functioning are often pronounced. This integrative review examined published research on SEL interventions for learners with disabilities to identify recurring patterns, effective practices, and contextual influences across the field. The reviewed literature consistently highlights the importance of three interrelated domains: regulatory foundations, relational pathways, and multimodal learning environments. Studies report that explicit SEL instruction, modeling, structured practice, and peer-mediated activities are particularly effective in strengthening social and emotional competencies. Research further emphasizes the significance of adult responsiveness, predictable environments, and scaffolded learning routines for students with ADHD, autism spectrum disorder, learning disabilities, and emotional and behavioral disorders. Digital tools—including virtual simulations and video modeling—have emerged as promising supports for learners who benefit from controlled and repeatable contexts. Facilitators of strong outcomes include teacher expertise, family involvement, and school-wide ecological supports, while barriers include inconsistent implementation, sensory sensitivities, and cultural misalignment. Across disability categories, SEL participation is associated with gains in emotional regulation, social communication, and self-efficacy. Tensions in the literature involve the balance between fidelity and individualized adaptation, as well as the need to ensure that digital SEL experiences translate to authentic social settings. The review concludes that effective SEL in special education requires aligning regulatory readiness, relational support, and accessible, multimodal instructional environments. The findings underscore the importance of integrating SEL into individualized programs, professional development, and inclusive educational policies.

Keywords — Social-emotional learning; special education; integrative review; digital SEL; autism; ADHD; regulation; inclusive education.

I. Introduction

Social-emotional learning (SEL) has become a key part of modern education because it greatly impacts emotional regulation, social skills, and academic involvement (Durlak et al., 2011; Taylor et al., 2017). For students with disabilities, SEL is especially vital since many face ongoing difficulties in communication, self-control, and social understanding (Hilton et al., 2007).

Theoretical models like Social Learning Theory (Bandura, 1977), Ecological Systems Theory (Bronfenbrenner, 1979), and Universal Design for Learning (Meyer et al., 2014) emphasize that SEL skills develop through observing, contextual support, and accessible, multimodal learning experiences.

Research in special education shows that SEL programs can greatly improve students' emotional awareness, behavioral regulation, and relationships with peers and adults (Gresham et al., 2001; Frankel et al., 2010; Laugeson et al., 2012). Despite this, studies differ widely in their focus, strategies for implementation, target groups, and outcomes. These differences make it difficult for educators and policymakers to determine the most effective ways to support SEL development among learners with disabilities.

This integrative review synthesizes existing research to identify consistent themes, effective practices, and common challenges across SEL interventions for students in special education settings.

Literature Review

A growing body of evidence shows SEL's positive effects on emotional regulation, social skills, and academic performance (Durlak et al., 2011). For students with ADHD, structured SEL programs that focus on behavioral regulation and peer interaction have proven effective in lowering impulsivity and increasing social engagement (Antshel & Remer, 2003; Gardner & Gerdes, 2015). Autistic students often benefit from predictable routines, clear instruction, visual supports, and opportunities to practice social skills in a structured and supportive environment (Golan & Baron-Cohen, 2006; Hopkins et al., 2011).

Peer-mediated SEL programs have been widely used and validated, especially for adolescents. The PEERS model, for instance, has demonstrated notable improvements in conversational skills, perspective-taking, and friendship building (Laugeson et al., 2012; Gantman et al., 2012). Other relationally focused interventions highlight the central role of adult responsiveness, co-regulation, and guided practice in strengthening SEL competencies (Koegel et al., 1999; Gulsrud et al., 2010).

Digital SEL tools—including virtual reality platforms, interactive avatars, and computer-based social simulations—have also become more prominent. These methods support learners who benefit from predictable, repeatable environments, reduced social anxiety, and visually mediated instruction (Ke & Im, 2013; Ramdoss et al., 2012). While promising, studies highlight the importance of ensuring that skills learned in digital environments transfer to real-world social settings (Odom et al., 2015).

II. Methodology

This study used an integrative review method to analyze published research on social-emotional learning (SEL) interventions in special education. The aim was to find common patterns, practices, and contextual factors across the literature. The following subsections outline the scope of the review, the sources consulted, and the procedures used to organize the findings.

Search Focus and Scope

The review included peer-reviewed studies that examined SEL instruction, intervention components, outcomes, or implementation factors for learners receiving special education services. Research involving students with autism spectrum disorder, attention-deficit/hyperactivity disorder, learning disabilities, emotional and behavioral disorders, and other disability classifications was considered. Both school-based and clinical school-adjacent settings were included when the intervention targeted educational or social-emotional outcomes.

Inclusion Criteria

Studies were included if they addressed social-emotional development, emotional regulation, social communication, behavioral engagement, peer interaction, or the use of technology to support SEL. Articles also had to provide insights relevant to instructional practices, learner needs, environmental supports, or teacher and peer interactions. Intervention studies, program evaluations, and conceptual analyses focusing on SEL in disability contexts were all eligible. Studies that did not address SEL content or did not focus on learners with disabilities were excluded.

Analysis and Organization of Findings

After relevant studies were identified, their findings were examined for recurring patterns in how SEL was taught, supported, or experienced across disability categories. Key ideas from the literature were grouped into broad domains reflecting intervention components, contextual supports, learning environments, and learner outcomes. Emphasis was placed on identifying consistent themes across multiple sources, rather than on evaluating methodological rigor or comparing study designs. The final synthesis reflects areas of convergence across the reviewed literature.

III. Results and Discussion

Across the literature, SEL interventions for students in special education consistently highlight three interconnected domains: regulatory foundations, relational pathways, and multimodal learning environments. These domains are repeatedly identified as essential for learners with disabilities to develop and apply SEL skills.

Regulatory foundations emerged as a central theme, with numerous studies highlighting the need for structured routines, explicit instruction, and environmental predictability to support attention and emotional control among students with ADHD, autism, and emotional and behavioral disorders (Chronis et al., 2006; De Boo & Prins, 2007). SEL strategies such as modeling, visual cues, guided breathing, and regulated transitions were shown to help students build the stability required to engage socially and emotionally (Mundy et al., 2009).

The literature also highlighted the importance of relational pathways, including adult responsiveness, co-regulation, peer interactions, and guided social exposure. Interventions using peer-mediated instruction showed improvements in communication, empathy, and social reciprocity (Laugeson et al., 2012; Frankel et al., 2010). Studies focusing on early developmental skills emphasized joint attention, imitation, and emotionally attuned adult-child interactions as the foundation for social-emotional development (Whalen & Schreibman, 2003; Koegel et al., 1999).

A third central theme involved multimodal learning environments, including digital and technology-enhanced tools. Virtual simulations, video modeling, computer-assisted role-play, and avatar-based social practice allowed learners—particularly autistic students—to rehearse interactions safely and predictably (Golan & Baron-Cohen, 2006; Hopkins et al., 2011; Ke & Im, 2013). These tools also enabled repeated practice and supported learners with sensory sensitivities. However, research cautioned that while technology increases engagement, it should complement—not replace—natural social experiences (Odom et al., 2015).

Across disability categories, SEL participation was linked to better emotional regulation, communication skills, self-efficacy, and school engagement (Antshel et al., 2011; Hilton et al., 2007). Facilitating factors included teacher expertise, family involvement, and collaboration among school teams (Bierman et al., 1999; Jagers et al., 2019). Barriers included inconsistent implementation, lack of training, cultural mismatch in SEL content, and sensory or behavioral challenges in unstructured settings.

Recurring tensions were also observed. One relates to balancing fidelity to structured SEL curricula and the need for individualized accommodations (Gresham et al., 2001). Another concerns the relationship between digital tools and genuine social interactions—while digital tools improve predictability, they might not fully capture real-life social nuance (Provoost et al., 2017).

IV. Conclusion

This integrative review shows that SEL interventions in special education are most effective when they align regulatory support, relational engagement, and multimodal learning environments. Students with disabilities benefit from explicit instruction, structured routines, and opportunities for guided and peer-mediated practice. Digital tools provide valuable support but must be combined with naturalistic social experiences. Improving SEL outcomes involves investing in teacher training, integrating SEL into individualized and school-wide systems, and ensuring culturally responsive and accessible instructional environments. Future research should

continue exploring how SEL frameworks can be adapted for diverse learners while maintaining authenticity, inclusivity, and developmental appropriateness.

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