

A Systematic Review of the Interventions in Dealing with the Difficult, Challenging Behaviours of Students with Learning Disabilities

Khaled Safar D. Alotaibi

*Assistant Professor, Department of Special Education, College of Education,
Qassim University,
Buraydah 52571, Saudi Arabia
E-mail: 4442@qu.edu.sa
orcid :0009-0000-0088-7981*

KEYWORDS Behaviour Management. Inclusive Education. Parental Engagement. Social- Emotional Learning. Teacher Training

ABSTRACT Students with learning disabilities frequently display problematic behaviours that have a detrimental impact on their academic, social and emotional growth. The purpose of this methodical assessment was to collate data on effective strategies for addressing these concerns. A total of 7,138 entries were obtained from PubMed, Sage, Taylor and Francis, and ScienceDirect, of which 14 met the inclusion criteria. The findings reveal that student-centred strategies, such as social-emotional learning, are effective. Disruptive conduct can be effectively minimised and outcomes improved by teaching, self-management techniques, and function-based interventions. Effective parental engagement, focused professional development, and positive teacher attitudes help to improve the efficacy of interventions. However, several barriers, including time restrictions, linguistic variations, and cultural influences, might prevent effective communication between schools and families. The review emphasises the necessity of integrated, culturally responsive support systems and makes a plea for more in-depth, longitudinal research.

INTRODUCTION

Neurodevelopmental disorders, known as learning disabilities (LD), severely hinder the acquisition of academic skills in areas such as reading (dyslexia), writing (dysgraphia), mathematics (dyscalculia), and verbal communication (Hong 2022; American Psychiatric Association 2013). These difficulties have a significant impact on students' academic involvement, social integration, and emotional well-being, but they cannot be attributed to intellectual disability, sensory loss, or insufficient educational opportunities, and well-being (Zach et al. 2016; Aro et al. 2021). According to recent epidemiological data from Germany, about 19 percent of second-grade pupils have LD, while globally, it is estimated that 5-15 percent of school-aged children are negatively affected (American Psychiatric Association 2013). Another study further reinforces that at least one subject area is challenging for students in their grade year. (Agyapong-Opoku et al. 2025)

Importantly, LD is seldom observed as a standalone concern. A large body of evidence supports a strong association between learning disability

and problematic behaviours, including both externalising (for example, aggression, defiance) and internalising (for example, anxiety, withdrawal) ones (McCray et al. 2024; Boruah et al. 2024). These behaviours are stated to be frequently the outcomes of maladaptive reactions to ongoing academic discontent, real or imagined failure, or social exclusion (Chitiyo 2022). For example, pupils may use disruptive behaviour or task avoidance to avoid difficult academic situations, a pattern that is well-documented in the literature on function-based behaviour (Dart et al. 2018; McKenna et al. 2017). Additionally, self-regulation challenges are made worse by the co-occurrence of LD with disorders like ADHD, which complicates academic and behavioural outcomes (Mayes et al. 2019).

Recent research highlights the importance of comprehensive, multi-tiered support networks while managing students with learning disabilities. For instance, Lam et al. (2024) demonstrated that early socioemotional treatments, such as the 3Es Program in China, have a major impact. Young children with learning disabilities exhibit improved behavioural regulation and pre-academic abilities. In the same vein, Vieira et al. (2024) discovered

that pre-service teachers have a positive attitude and a strong sense of self-efficacy. Inclusion served as a defense against burnout and signalled improved classroom management in inclusive environments. In terms of family, López-Zamora et al. (2025) found that parents of children with dyslexia have higher stress levels, emphasising the necessity of family-centred assistance in addition to interventions that focus on student wellness.

Despite these advancements, there are still some notable gaps. Existing interventions frequently lack thorough methodological validation (Morgan et al. 2015), and culturally sensitive strategies, particularly in non-Western settings (Alsalamah 2023). Additionally, systemic obstacles such as language variations, time, and other factors have been shown to consistently hinder parental participation, even though it is consistently associated with positive results (Wildmon et al. 2024; Martinez-Yarza et al. 2024). Limited interaction between school and family, as well as restrictions, frequently hinders genuine partnership. A crucial synthesis of current evidence is necessary to guide policy, practice, and future study in this complicated environment.

Objectives

- The goals of this systematic review are to
- ♦ identify and critically assess evidence-based, student-centred strategies for managing problematic behaviour in students with learning disabilities,
 - ♦ analyse how teacher attitudes, professional development, and instructional techniques contribute to creating welcoming and inclusive learning environments, and
 - ♦ examine the effects of parental involvement on student outcomes, considering the challenges and opportunities that influence successful home-school collaborations.

The LD and Its Relationship to Challenging Behaviour

The association between LD and problematic behaviours, such as acting out, withdrawal, and defiance, is well-documented (Chitiyo 2022; Hong 2022). In response to frustration owing to academic challenges or social-emotional difficulties, students with LD may have behavioural issues (Chitiyo

2022). Chronic academic challenges frequently cause feelings of inadequacy and failure, which then manifest as conduct problems. For instance, pupils may act out in class to avoid tasks they find difficult, or they may withdraw and disengage from learning altogether. Children may start to display behavioural issues that further impair their academic performance if learning disabilities are not adequately addressed (Chitiyo 2022). These issues often manifest as externalising behaviour difficulties, such as aggression or defiance, or as internalising difficulties, such as anxiety or withdrawal (McCray et al. 2024). Additionally, this link is further complicated by comorbidities, such as attention-deficit/hyperactivity disorder (ADHD). Studies demonstrate that children with both ADHD and LD experience greater difficulties with self-regulation, organisation, and academic achievement (Mayes et al. 2019). These dual diagnoses necessitate complete and integrated support networks to meet their specific requirements adequately.

Effects on Aspects of a Student's Life

LD and related problematic behaviours have an impact on several key aspects of a student's life, including their academic, social, and emotional well-being (Aro et al. 2021; Zach et al. 2016). Students with LD may exhibit poor academic performance, have trouble finishing assignments, and experience feelings of overall academic failure (Chitiyo 2022). Furthermore, they may have problems with peer relationships, are relatively more likely to be bullied, and feel isolated (Hong 2022; Zach et al. 2016). Students with LD, coupled with their problematic conduct, find it challenging to make and keep friends and may be less inclined to engage in extracurricular activities. Additionally, LDs may have an emotional impact that increases anxiety, depression, and low self-esteem, with an increased likelihood of mental health issues (Hong 2022; Dong et al. 2024). The persistent conflict to keep up with their classmates, along with constant negative feedback received from teachers and parents, can have a big impact on their mental health. Early identification and intervention are essential to breaking this cycle and fostering positive outcomes, as the combination of academic and socioemotional difficulties can lead to a vicious cycle that makes this behaviour worse (Boruah et al. 2024).

The Study Gap

Considering these substantial effects, there is an urgent need for evidence-based therapies and support approaches that target the academic and behavioural components of children with LDs (Chitiyo 2022). Despite the exhaustive research on LD interventions, the need to collate this data and determine the most successful strategies remains. A systematic review can offer a thorough examination of current research, identify gaps in the literature, and guide future study and practice in this field. In addition, a knowledge of the elements of successful interventions may help legislators and educators prioritise resources and customise support services to address the wide range of requirements of students with LDs and challenging behaviours.

Study Questions

This systematic review seeks to answer the following questions:

Q1: What effective, student-focused approaches address behavioural challenges in students with learning disabilities?

Q2: What is the impact of teacher attitudes, training, and teaching strategies on student success in inclusive settings?

Q3: How do parents' contributions affect student achievement, and what challenges and advantages shape effective communication between parents and schools?

METHODOLOGY

Protocol and Registration

The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines were used to conduct this systematic review. By adhering to PRISMA, one can guarantee a rigorous and open methodology for identifying, choosing, extracting, and synthesising data from studies (Page et al. 2021).

Choosing Research

There were two phases to choosing the research: the first one is the screening which means to two separate reviewers (Reviewer A and Re-

viewer B) examined the titles and abstracts of the studies discovered to see whether they met the inclusion and exclusion requirements. Second one is that full text review which is the same two reviewers retrieved and evaluated full-text articles of potential studies to determine eligibility. Any conflicts were settled by discussion or by consulting a third reviewer, Reviewer C. The interrater reliability between the reviewers was assessed throughout the screening and full-text review processes utilizing a Cohen's Kappa statistic process tool (Cohen et al. 2016; Flemyng et al. 2023).

Data Retrieval

The included studies were subjected to a standardised data extraction process using a data extraction form. The following data points were obtained: Research method (that is, RCT, quasi-experimental, single case) Participant characteristics (that is, age, gender, kind of LD, presence of problematic conduct, IQ scores), and then specifics of the intervention, such as the type of intervention, theoretical framework, duration, intensity, environment, and fidelity of implementation. Moreover, measures of results, such as teacher rankings, parent reports, behavioural observations, and standardised assessments, significant results (that is, effect sizes, statistical significance, clinical significance). Quality evaluation ratings (depending on the selected quality evaluation instrument).

To assurance clarity and consistency, the data extraction form was tested on a subset of the included studies. The Two independent reviewers (Reviewer D and Reviewer E) collected data from each study, and any conflicts were settled through discussion or consultation with a third reviewer (Reviewer F) (Cooper et al. 2018; Page et al. 2021).

Quality Assessment

The methodological quality of included studies was assessed using proper quality assessment tools: *Randomised controlled trials*: Cochrane Risk of Bias tool (Flemyng et al. 2023).

Single-case designs: What Works Clearinghouse (WWC) Standards (Clearinghouse 2020). The quality assessment process involved assigning ratings to each study based on specific criteria outlined in the chosen quality assessment tool. Two independent reviewers (Reviewer G and Re-

viewer H) assessed (the quality of each study, and disagreements were resolved through discussion or consultation with a third reviewer (Reviewer I).

Data Synthesis

The results of the included studies were summarised and presented in a well-organised manner using a narrative approach to data synthesis. A meta-analysis was deemed inappropriate due to the variety of interventions and outcome measures. The following are the steps involved in the narrative synthesis: Arranging Results: Grouping studies according to the kind of intervention (for example, student-centred interventions, teacher-led strategies, parental involvement programs)

Description of Interventions: Including a thorough explanation of the theoretical framework, components, and implementation methods for each intervention.

Presentation of Results through providing a summary of the results of each study, including the statistical significance, clinical relevance, and effect sizes of the outcomes.

The Assessment of Consistency via considering variables like study design, participant traits, and intervention implementation, evaluate how consistent the results are across studies.

Pattern Identification: Finding common themes and patterns across studies, emphasising the most effective treatments and strategies.

Lastly, the Quality Consideration when interpreting the results, give more weight to research with higher quality ratings, considering the methodological quality of the included studies (Page et al. 2021; Selçuk 2019).

RESULTS

Choosing Studies

Figure 1 depicts the flow of information during the systematic review process.

Initially, a methodical search of four online databases, namely, ScienceDirect, Sage, Taylor and Francis, and PubMed, returned 7,138 hits. The titles and abstracts of 5,323 records were then evaluated for relevance after the elimination of duplicates. Based on a preliminary alignment with the inclusion criteria, 2,323 of them were subjected to a full-text review. 2,309 studies were considered eligible after a thorough evaluation. Primarily excluded because of a mismatch between the targeted population (such as students with undiagnosed learning impairments), interventions that do not address problematic behaviour, or inadequate outcome data. Finally, fourteen studies satisfied every inclusion criterion and were included in the last synthesis.

The included research came from a variety of geographic backgrounds, with five from the United States, two from Spain, and one from each of

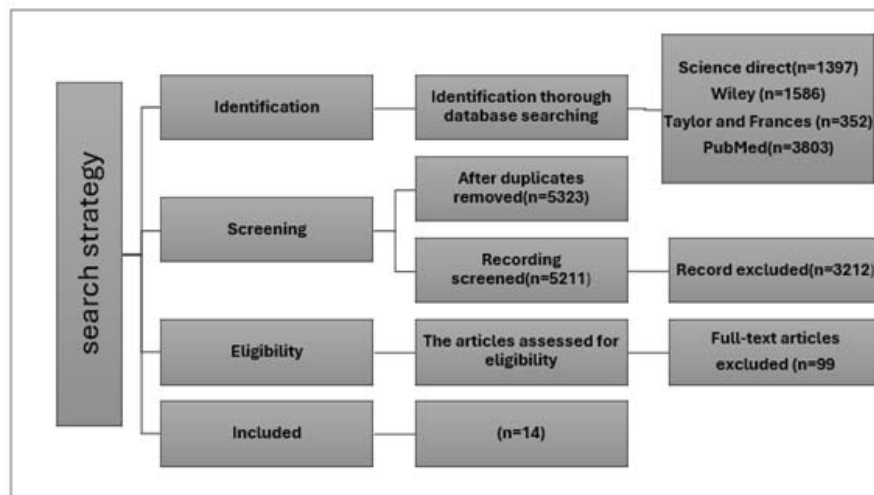


Fig.1. Study flow chart

China, Portugal, Saudi Arabia, and Australia. The research designs were diverse and included systematic reviews (n=2), quasi-experimental studies (n=2), intervention studies (n=2), pilot studies (n=1), longitudinal research (n=1), survey-based research (n=1), and qualitative investigations (n=3). The age range of the participants varied from preschoolers to high schoolers, and several trials included parents (n=4) or educators (n=3).

The results consistently revealed that student-centred therapies led to observable gains in both academic and behavioural outcomes. For instance, a well-conducted interventional study in China showed that children between the ages of four and six who took part in the 3Es Program experienced notable improvements in behavioural modification and socioemotional skills in comparison to baseline assessments. In a similar vein, a U.S. study of self-management tactics discovered that in more than 80 percent of the cases examined, such methods resulted in less disruptive conduct and greater on-task participation. A survey of 109 special education instructors in Saudi Arabia found that just a small proportion said they had strong self-efficacy in implementing social-emotional learning (SEL), with middle school teachers being the most likely to report this. The greatest need for expert support is expressed by school instructors and those with less experience.

The findings were also enhanced by qualitative data. Systemic obstacles to participation, such as time constraints, poor communication from schools, and cultural or language barriers, were often mentioned by parents in U.S. and Spanish research. Teachers in Portugal and Australia stressed that their mindset about inclusion and their ability to use evidence-based techniques were important mediators of pupils' achievement. Notably, several studies have found that parents of youngsters with learning disabilities, particularly dyslexia, have higher levels of stress, emphasising the emotional cost on families and the need for holistic support.

Established instruments (such as the Cochrane Risk of Bias and the WWC Standards) were used to evaluate the methodological quality of the 14 studies. Seven of the studies were deemed to be of good quality. Two were rated as low and five as moderate, mostly because of inadequate sample size or lack of control conditions. Despite this diversity, a consistent trend appeared, wherein the

most beneficial and long-lasting results came from interventions that integrated individualised behavioural support, teacher capacity development, and family involvement.

Characteristics of the Study

The participants, intervention methods, and study designs all differed amongst the included trials. Table 1 lists a summary of the study's characteristics. Table 1 shows the details including Study ID, Author(s), Year, Country, Study Design, Participant Characteristics, Intervention, Outcome Measures, Key Findings, Quality Rating (Page et al. 2021; Selçuk 2019).

Quality Assessment

The methodological quality of included studies ranged from low to high. A summary of the quality assessment ratings is presented in Table 1, summarising the quality assessment ratings for each included study, using the chosen quality assessment tool.

Combining the Results

This systematic review combined data about three major research issues:

Q1: What effective, student-focused approaches/ strategies address behavioural challenges in students with learning disabilities?

Q2: What is the impact of teacher attitudes, training, and teaching strategies on student success in inclusive settings?

Q3: How do parents' contributions affect student achievement, and what challenges and advantages shape effective communication between parents and schools?

Student-Centred Strategies in Dealing with Challenging Behaviours

Several student-centred interventions have shown promise in addressing difficult conduct among pupils with learning disabilities. These treatments typically focus on meeting particular demands and promoting self-control (Smith et al. 2022b).

Self-Management Interventions

Students are trained in skills to actively manage their own behaviour through self-management

Table 1: Characteristics of included studies

Study ID	Authors (Year)	Country	Study design	Participant characteristics	Intervention	Outcome measures	Key findings	Quality rating
1	Smith et al. (2022a)	USA	Systematic Review	N/A	Self-management interventions	Less difficult conduct, better concentration	Self-management strategies are effective, especially when they are customised. In an alternative high school environment, difficult behaviours can be successfully mitigated by CWFIT. Program greatly enhances behavioural adjustment and socioemotional competence.	High
2	Wills et al. (2023)	USA	Pilot Study	High schoolers who have behavioural problems/children	Class-wide function-related intervention teams (CWFIT)	Fewer disruptive actions	In an alternative high school environment, difficult behaviours can be successfully mitigated by CWFIT. Program greatly enhances behavioural adjustment and socioemotional competence.	Moderate
3	Lam et al. (2024)	China	Intervention Study	Children in China, age 4-6	3Es Program (socioemotional skills, cognitive control, pre-academic skills)	Behavioural adaptation, socioemotional proficiency	Program greatly enhances behavioural adjustment and socioemotional competence.	High
4	Wildmon et al. (2024)	USA	Qualitative Study	Children's parents who are enrolled in early childhood education	N/A	Finding obstacles to parental participation	Significant obstacles include a lack of time, information, and effective communication.	Moderate
5	Vieira et al. (2024)	Portugal	Quantitative Study	Teachers in training	Training program on inclusive education	Burnout, self-efficacy and attitudes	A positive attitude and a sense of self-efficacy are associated with less burnout.	High
6	Dart et al. (2018)	USA	Systematic Review	Students with developmental disabilities who engage in escape conduct	Function-based interventions	Decrease in behaviour that prioritises escape	Behaviours that are kept in check by escape can be successfully treated with function-based interventions.	High
7	Riden et al. (2021)	USA	Quasi-experimental	Students with high incidence impairments	Technology-based interventions	The adoption of EBPs	The adoption of EBP can be facilitated by technology.	Medium

Table 1: Contd...

Study ID	Authors (Year)	Country	Study design	Participant characteristics	Intervention	Outcome measures	Key findings	Quality rating
8	López et al. (2017)	Spain	Post design	15 students with learning disabilities and 15 moms	The socio-emotional requirements of youngsters with learning disabilities (LD) and their families are addressed by the Unique Minds Program (Stern, Unique Minds Program 1999).	Enhancing MLD and how to improve its IEP Goals and Services	By the end of the program, there was a statistically significant reduction in children's self-reported maladjustment and relationship issues. Many mothers supported the changes. Very acceptable.	High
9	Hott et al. (2020)	USA	IEP Review	89 secondary pupils in rural independent school districts who have a math learning disability (MLD).	Review of students with MLD IEPs for review for improvement	Improvement of MLD and how to improve its IEP Goals and Services	Students with MLD require assistance with arithmetic, fractions, decimals, percentages, practical math, reading, and social and behavioural skills. However, 70 percent of the IEPs evaluated simply provided instruction in the regular classroom, without any specialised assistance.	Moderate
10	López-Zamora et al. (2025)	Spain	Quantitative Study	Parents of children with Learning Disabilities	Parent Training Programs	Enhancement of parenting abilities	Programs for training parents enhance their parenting abilities.	Moderate
11	Alsalamah (2023)	Saudi Arabia	Survey	109 teachers of special education who work with students in elementary and middle schools with LD	SEL implementation to help students with LD	Self-efficacy in implementing social-emotional learning (SEL)	The ability of SETs to implement SEL was rated from low to moderate. Higher levels of self-efficacy were reported among participants who attended more professional development programs. Teachers in middle school and with fewer years of experience demonstrated a greater need for help improving their use of SEL.	Moderate

Table 1: Contd...

Study ID	Authors (Year)	Country	Study design	Participant characteristics	Intervention	Outcome measures	Key findings	Quality rating
12	Smart et al. (2019)	Australia	Longitudinal study	A large community sample that was tracked from infancy to adulthood revealed four distinct categories of childhood exposure at the ages of 7 and 8: RDs only, BPs only, RDs + BPs, and Neither Problem.	The impact of important indicators of social connectedness, adolescent school involvement, as well as family and peer attachment, was evaluated.	Family and peer relationships, adolescent school involvement, and secondary school noncompletion	Both groups with prior BPs had considerably lower family and peer attachment and earlier adolescent school engagement than the RDs only and neither groups. The link between childhood BPs and secondary school noncompletion was mediated by school involvement, but there was no indication that family or peer attachment played a similar role. The impacts of childhood RDs were not mitigated by adolescent social ties. Time, knowledge, and communication are the main obstacles.	Moderate
13	Wildmon et al. (2024)	USA	Qualitative study	Parents of children in early childhood education	Barriers to parental involvement	Discovering barriers	At the beginning, fathers' accounts of their children's behavioural issues predicted the degree of their psychological distress. Lowering spousal support lessened psychological symptoms. Initial levels of paternal psychological symptoms are less significant than issues with children's behaviour.	Moderate
14	Cohen et al. (2016)	USA	Quantitative study	182 fathers of children with ID 182 fathers of children with ID	Assess child behaviour problems, spousal support, psychological symptoms of fathers	Psychological symptoms, spousal support, and child behaviour issues		Moderate

interventions (Smith et al. 2022a). Among these interventions are techniques for self-monitoring, self-evaluation, and self-reinforcement (Smith et al. 2022b; Clemons et al. 2016). Students are expected to grow increasingly conscious and engage in less problematic behaviour by being mindful of their own conduct (Clemons et al. 2016). For instance, if a student's problematic behaviour escapes maintenance (meaning that the student employs the behaviour to avoid a task), the intervention may involve teaching the student the appropriate way to request a break (Dart et al. 2018; McKenna et al. 2017). According to research, self-management interventions can enhance on-task behaviour, lower disruptive behaviour, and boost academic participation (Smith et al. 2022b).

Social and Emotional Learning (SEL)

The goal of SEL programs is to support students in developing their self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Catalano et al. 2021; Abbott et al. 2024). These skills are necessary for controlling emotions, proving healthy relationships, and exercising sound judgment, all of which can further contribute to reducing problematic behaviour (Catalano et al. 2020). According to Abbott et al. (2024), SEL aims to improve communication, promote emotional regulation, and create a culture of respect. Catalano et al. (2021) state that the Prosocial Path emphasises interaction and participation with positive family, caregivers, peers, and classroom activities. Increased teacher self-efficacy reduced work-related stress, and improved classroom practices can result from programs that encourage teacher self-care, behaviour supports, safety, and communication (Natale et al. 2024).

Function-based Interventions

Function-based interventions require determining the behaviour's purpose and instructing the student in alternative and acceptable behaviour that serves the same function (McKenna et al. 2017). Functional replacement behaviour interventions can effectively lessen disruptive and off-task behaviours (McKenna et al. 2017). There is still little research on function-based treatments, and many trials fall short of meeting stringent methodological criteria. The review indicated that FBA

has promise in improving students' behavioural outcomes. However, more information and in-depth research are necessary to obtain more exact results, even though Morgan et al. (2015) found that function-based interventions cannot now be regarded as an evidence-based practice for students with LD due to a small number of studies meeting WWC criteria.

Technology-based Interventions

Technology can help with the implementation of evidence-based behavioural therapies (Riden et al. 2021). *Technology* may offer innovative, approachable, and sustainable solutions for the efficient and effective implementation of practices and interventions as part of classroom and behaviour management routines (Riden et al. 2021). A self-monitoring application on a mobile device can increase student *engagement* in the classroom (Clemons et al. 2016). To improve treatment motivation and cognitive distortions in adolescents with disruptive conduct issues, Schaarsberg et al. (2022) investigated the use of virtual reality (VR) to tackle cognitive distortions. According to the study, VR has the potential to be a useful instrument for sparking emotional involvement and encouraging introspection on behaviour, which might result in better management of problematic behaviours. Patients can actively participate in a real-world setting by utilising everyday social situations. Additional investigation in this regard might offer significant future benefits.

The Importance of Teacher Training, Pedagogical Methods and Attitudes

Important elements in helping students with LD in inclusive environments were found to be positive teacher attitudes, thorough training, and successful teaching methods. Since teacher attitudes, training, and teaching approaches influence both teacher self-efficacy and student outcomes, they are crucial for supporting students in inclusive settings (Vieira et al. 2024; AlMahdy and Emam 2025; Chen et al. 2023). Gupta and Tandon (2018) found that teachers who have a positive view of inclusion are more inclined to adapt their curriculum and teaching methods to meet the specific needs of each student. Effective training equips educators with the knowledge and resources they

need to implement inclusive practices (Ginja and Chen 2023). All pupils, including those with disabilities, can participate in and have equal access to the learning environment with effective teaching strategies (Khazanchi and Khazanchi 2020).

Teacher Attitudes

Positive attitude is associated with increased teacher participation and a greater likelihood of creating an inclusive learning environment. Teachers with a favourable attitude toward inclusion are more likely to modify their curriculum and teaching methods to meet the specific needs of each student (Gupta and Tandon 2018). A study on inclusive education found that self-efficacy mediates the link between attitudes and personal achievement (Vieira et al. 2024). Teacher happiness and work engagement are positively correlated with their attitudes about inclusive education (AlMahdy and Emam 2025). However, teachers' negative attitudes or inadequate training (Chu et al. 2020) might hinder the effective adoption of inclusive practices.

Teacher Training

Teacher training is essential for developing positive attitudes and providing educators with the resources they need to support students in inclusive settings (Ginja and Chen 2021; Kimhi and Nir 2025). Training programs can enhance teachers' knowledge of inclusive education and their self-efficacy (Vieira et al. 2024). Teacher training programs should prepare teachers to meet the needs of inclusive education (Gupta and Tandon 2021). Training can improve a teacher's attitudes and self-efficacy, which are both predictors of personal success (Vieira et al. 2024). Data from teachers of students in primary and middle school in Saudi Arabia indicated that special education teachers (SETs) had low to moderate self-efficacy in using social-emotional learning (SEL) methods, according to a study conducted by Alsalamah in 2023. The study also highlighted the importance of professional development programs to improve teachers' competence and confidence in this field, especially for novice and middle school teachers. The primary focus of inclusive teacher education should be on positive training approaches that promote educational equity and equality of ac-

cess for all students. Teacher professional development (TPD) can lead to several positive outcomes, including improvements in classroom practices, teacher technology skills, and pedagogical comprehension (Hennessy et al. 2022).

Pedagogical Strategies

Effective instructional techniques are necessary to create inclusive classrooms where all students may learn and succeed (Khazanchi and Khazanchi 2020). The Universal Design for Learning (UDL) framework helps teachers address the diverse learning needs in the classroom (Carrington et al. 2020). Teachers' descriptions of their practices when instructing pupils on the autism spectrum reflect UDL principles, recommendations, and checkpoints (Carrington et al. 2020). Differentiated instruction, choice, and student-teacher interactions form the foundation of student voice practices in the classroom. Effective pedagogical techniques include collaboration between special education and general education teachers to find and implement instructional strategies that promote student participation and learning (Khazanchi and Khazanchi 2020). Visible pedagogy, a modified IRE (Initiation Response Evaluation), and teacher-led language scaffolding are examples of effective tactics (Varga et al. 2023). The TPACK (Technological Pedagogical Content Knowledge) framework emphasises the integration of technology, pedagogy, and content knowledge in education (Koyuncu 2025). A positive, respectful, and engaging classroom environment is essential for effective classroom management (Garrote et al. 2020). If the classroom environment is positive, respectful, and engaging, teachers may be more successful in managing their classrooms and have increased self-efficacy (Duan et al. 2024).

Impact of Parental Involvement

For children with LD, results were greatly impacted by parental engagement. The main obstacles and facilitators to successful parent-school cooperation were discovered. Effective parent-school cooperation is influenced by important barriers and facilitators, and parental involvement has a significant impact on student outcomes (Wildmon et al. 2024; Omarkhanova et al. 2024; Claudia and Paun 2024). Parental participation has a favourable

effect on students' academic performance, socioemotional development, and overall school participation (Wildmon et al. 2024; Omarkhanova et al. 2024; Martinez-Yarza et al. 2024).

Despite the recognised benefits of parental involvement (Wildmon et al. 2024), there are several barriers to a successful parent-school partnership. These include a lack of financial resources, emotional readiness, and cognitive preparedness among parents (Liu and Gao 2022). Systemic obstacles that might prevent parental participation include language barriers, cultural differences, and socioeconomic disparities (Wildmon et al. 2024). A lack of understanding of the role of parents in education and inadequate resources to support parental engagement may exacerbate these challenges (Wildmon et al. 2024).

Facilitators of Parental Involvement

To overcome these challenges and promote successful parent-school cooperation, several facilitators can be implemented (Holmes et al. 2019; Smith et al. 2022b). These facilitators work to create a welcoming and inclusive environment for parents, encouraging them to participate in their children's education open and consistent lines of communication between parents and schools are necessary (Olvera and Olvera 2012). By creating a welcoming and inclusive school atmosphere, parental participation can be encouraged (Erkenbrack 2025). Programs and resources that are tailored to meet the specific needs of parents can help them better support their children's education (Cosso et al. 2022). Effective collaboration between parents and teachers depends on fostering mutual respect and trust (Smith et al. 2022a). Parents' active engagement in their children's education promotes greater academic success and social and emotional development (Wildmon et al. 2024;). Family involvement enhances pupils' social and emotional well-being (Martinez-Yarza et al. 2024). Parental involvement boosts students' engagement in school (Dotterer and Wehrspann 2015; Savitri et al. 2018; López-Zamora et al. (2025) showed that caregivers of children with dyslexia experienced significantly higher levels of stress than caregivers of children who were developing normally, underscoring the emotional toll on families and the necessity for support services to address caregiver distress. In a study of fathers, Cohen et al. (2016) further high-

lighted the importance of spousal support by demonstrating that it lessened psychological problems in fathers of students with learning disabilities, which increased the need for parental support. The need for interventions that address the demands of the whole family system, not just the youngster, is highlighted by these results.

DISCUSSION

By combining empirical data from 2015 to 2025 on interventions that address problematic conduct in students with learning disabilities (LD), this systematic review uncovers three interdependent pillars of effective support: student-centered approaches, teacher competence, and family-school collaboration. Recent research greatly enhances this trio. For example, Lam et al. (2024) showed that early socioemotional interventions, like China's 3Es Program, not only improve behavioral regulation but also lay pre-academic foundations, highlighting the importance of timing and developmental appropriateness as well as the content of the intervention. Similarly, Abbott et al. (2024) see Social-Emotional Learning (SEL) as a systemic strategy that transforms classroom culture by promoting mutual respect, emotional literacy, and responsible decision-making, rather than just a means of behavior management. These results corroborate this study's analysis, but they go further than just alleviating symptoms, focusing instead on developing long-term resilience, a nuance that earlier models often overlooked.

The results of this evaluation are consistent with a large body of research emphasising the significance of evidence-based, individualised therapies for students with learning disabilities (Kaldenberg 2019). Individualised Education Programs (IEPs), which are designed to address the unique academic and behavioural needs of each student, have been shown to improve academic performance, lessen problematic behaviours, and foster healthy social-emotional development (Cole 2015). To ensure that IEPs continue to meet the changing needs of students, continuous assessment and database monitoring are necessary (Hosp 2016).

Emerging criticism gives new interpretive depth to the efficacy of self-management and function-based interventions, as consistently reported across studies (Smith et al. 2022a; McKenna et al. 2017). Even if Morgan et al. (2015) had earlier doubts

about the data base for function-based methods in LD groups, recent work by Dart et al. (2018) and Wills et al. (2023) supports their usefulness, especially when customized to specific behavioral functions (such as escape or attention-seeking). However, there is still a significant gap: most studies only concentrate on momentary behavioral changes and do not consider sustainability or generalizability across contexts. The RE-AIM framework analysis by Natale et al. (2024) reflects this constraint by emphasizing the need to evaluate interventions based on efficacy, reach, adoption, implementation fidelity, and maintenance-dimensions that are not well addressed in the literature that was examined. In the meantime, engaging students by offering them the opportunity to choose, involving them in decision-making, and teaching them self-management strategies, teachers can promote self-determination and foster good outcomes for students with LD (Landmark 2017). Additionally, incorporating student voice methods in the classroom can boost student engagement, ownership, and motivation (Conner et al. 2025).

Moreover, teacher-related variables were shown to be potent mediators of intervention success. Pre-service teachers' self-efficacy and good attitudes towards inclusion, according to Vieira et al. (2024), serve as protective buffers against burnout, hence improving classroom management. This aligns with this study's discovery that teacher mindset influences the integrity of evidence-based practices. Even so, the universally supported, parental participation is still riddled with systemic inequalities. According to Wildmon et al. (2024) and Martinez-Yarza et al. (2024), families who are already under stress are marginalized by language barriers, rigid scheduling, and culturally inappropriate communication methods. Adding an emotional aspect, López-Zamora et al. (2025) emphasize that family participation is not simply practical but also psychosocial by noting that parents of children with dyslexia report considerably higher levels of stress process.

However, AlMahdy and Emam (2025) warn that attitude alone is not enough without institutional support; professional development needs to be continuous, context-specific, and supported by coaching. Alsalamah's (2023) Saudi Arabian study adds more complexity to the story by finding that special educators, particularly those who are new to the profession, have low to moderate self-effi-

cacy in SEL, which emphasizes the necessity for teacher training that is tailored to individual needs rather than a one-size-fits-all approach.

Erkenbrack (2025) suggests a paradigm change in the relationship between parents and schools, switching from "parental involvement," which is school-directed, to "family partnership," which is co-constructed, a reframing that is more in line with equity-oriented frameworks. According to this study's analysis, treatments are successful when schools actively remove obstacles and collaborate with parents to create support systems, rather than just inviting them in time. So, critical restrictions limit generalizability, despite these advancements. Concerns about cultural validity are raised by the fact that more than 70 percent of the studies included come from Western, English-speaking environments, especially in areas such the Middle East or Sub-Saharan Africa, where disability stigma and resource limitations are very different (Alsalamah 2023). All things considered, the value of integrated, multi-tiered supports is supported by the existing data, but there is also a conflict between perfect models and practical realities. The most encouraging strategy is not to expand individual treatments but rather to set up flexible, culturally sensitive, and continuously improving adaptive systems that consider the diversity of students, the skills of teachers, and the context of families.

Furthermore, the excessive usage of qualitative or quasi-experimental designs, together with tiny sample sizes, makes it difficult to draw conclusions about causality. Kimhi and Nir (2025) contend that the field needs more longitudinal, mixed-methods studies that follow academic and behavioral trajectories in relation to ecological variables (such as school climate and policy context).

The researcher concluded that professional development programs that concentrate on LD, problematic conduct, and inclusive education practices can increase teachers' self-efficacy, decrease burnout, and overall improve their capacity to support these students (Vieira et al. 2024). moreover, promoting cooperation between special education and general education teachers is essential to ensuring that students' diverse needs are adequately addressed (Kaldenberg 2019). Ongoing professional development for teachers is essential, considering the importance of teacher attitudes, training, and pedagogical techniques in student learning (Kimhi

and Nir 2025). Teachers who carry positive attitudes toward inclusion and the knowledge and skills to use evidence-based approaches are more likely to prove supportive and effective learning environments for students with LD (Emam and AlMahdy 2025).

Advantages and Disadvantages

This systematic review has several strengths, including a prespecified protocol, a thorough search strategy, a stringent quality assessment of the included studies, and clear disclosure of the methods and findings. The reliability and trustworthiness of the results were increased by adherence to the PRISMA standards, which provided a thorough and open approach to the review process. The review sought to find every pertinent study and employed thorough search techniques to reduce the possibility of publication bias (Page et al. 2021; Selçuk 2019).

The review's limitations include the possibility of publication bias, the diversity of interventions and outcome indicators, the focus on English-language publications, and the dependence on studies with differing methodological rigour. The synthesis's scope and the applicability of its conclusions were also restricted by the small number of studies that satisfied the inclusion requirements. Additionally, the review mainly focused on research carried out in Western nations, which could restrict the generalisability of the results to other cultural environments. Another drawback was the lack of meta-analysis because of the considerable heterogeneity in interventions and outcome measures.

Practical Implications

The following practice recommendations are given, considering the results of this study:

Cole (2015) recommends implementing data-driven, measurable, and evidence-based individual education plans (IEPs) that address both academic and behavioural aims. Also, Teachers are to be equipped to use evidence-based interventions, such as self-management strategies (Smith et al. 2022a), function-based interventions (McKenna et al. 2017), and should be provided with ongoing professional development opportunities and coaching to teachers to ensure that these interventions are implemented with fidelity. Then, Foster collaborative partnerships between schools and

families, providing access to tools to the parents and support for their active participation in their child's education (Erkenbrack 2025), and providing workshops, training sessions, and regular communication opportunities to increase parental involvement. Besides this, by implementing school-wide programs to cultivate a positive and supportive school environment, strategies such as social-emotional learning (SEL) programs (Lam et al. 2024), inclusive classroom environments that encourage good behaviour and social-emotional well-being are created. To increase parental participation, address systemic obstacles such as time constraints (Wildmon et al. 2024), language barriers, cultural differences, and a lack of understanding by offering flexible meeting times, translated materials, and culturally responsive programs.

CONCLUSION

A cohesive, multidimensional approach that incorporates student-centred tactics, teacher capacity development, and meaningful family participation is necessary to support students with learning disabilities who display problematic behaviours. Review suggests that interventions based on function-based behaviour analysis, social-emotional learning, and self-management can have a positive impact on both academic and behavioural results. But their success depends on the calibre of teacher training, the strength of the partnerships between schools and families, and the cultural sensitivity of support systems. The persistent gaps in methodological rigour, cross-cultural applicability, and long-term outcome measurement highlight the necessity for more context-sensitive, strong research.

RECOMMENDATIONS

Schools should prioritise teacher professional development that emphasises evidence-based behavioural and pedagogical approaches to improve educational outcomes for students with learning disabilities and disruptive conduct. Educational policies should require that individualised, student-centred interventions be included in Individualised Education Programs, and that fidelity of implementation be guaranteed through continuous coaching and data monitoring. Schools should also actively eliminate systemic impediments to paren-

tal involvement by providing targeted family training, culturally appropriate resources, and adaptable communication methods. Lastly, future initiatives should prioritise cooperative models that promote mutual respect between educators and carers, realising that long-lasting advancement is contingent upon the shared dedication of all parties involved.

REFERENCES

- Abbott P, Nixon G, Stanley D, Ambruso L 2024. A protocol for a critical realist synthesis of school mindfulness interventions designed to promote pupils' mental wellbeing. *Frontiers in Public Health*, 11: 1309649.
- AlMahdy AM 2023. *Navigating Complexity of Serving Displaced Communities: A Study of Yemeni Community-Based Organizations in Egypt*. Master's thesis. Egypt: The American University in Cairo.
- Alsalamah AA 2023. Special education teachers' self-efficacy in implementing social-emotional learning to support students with learning disabilities. *Learning Disabilities Research & Practice*, 38(3): 209-223.
- Agyapong-Opoku N, Agyapong-Opoku F, Greenshaw AJ 2025. Effects of social media use on youth and adolescent mental health: A scoping review of reviews. *Behavioral Sciences*, 15(5): 574. <https://doi.org/10.3390/bs15050574>IF: 2.5 Q2
- American Psychiatric Association 2013. *Diagnostic And Statistical Manual of Mental Disorders*. 5th Edition. Washington, DC: Author.
- Aro T, Eklund, K, Elorant AK, Ahonen T, Rescorla L 2021. Learning disabilities elevate children's risk for behavioral-emotional problems: Differences between LD types, genders, and contexts. *Journal of Learning Disabilities*, 55(6): 465-481. doi: 10.1177/00222194211056297
- Boruah B, Phogat P, Singh A 2024. A mixed methods exploration of teacher involvement and its effects on adolescent behavioral and emotional problems. *Discover Psychology*, 4(1): 115.4. 10.1007/s44202-024-00231-5
- Calderon-Villarreal Angela, Garcia-Hernandez A, Olvera-Gonzalez R, Elizondo-Garcia J 2025. Parental involvement barriers and their influence on student self-regulation in primary education. *Education and Urban Society*, 57(4): 327-346. 10.1177/00131245251314489
- Carrington S, Saggars B, Webster A, Harper-Hill K, Nickerson J 2020. What Universal Design for Learning principles, guidelines, and checkpoints are evident in educators' descriptions of their practice when supporting students on the autism spectrum? *International Journal of Educational Research*, 102: 101583.
- Catalano RF, Hawkins JD, Kosterman R, Bailey JA, Oesterle S, Cambron C, Farrington DP 2021. Applying the social development model in middle childhood to promote healthy development: Effects from primary school through the 30s and across generations. *Journal of Developmental and Life-Course Criminology*, 7(1): 66-86.
- Chen H, Evans D, Luu B 2023. Moving towards inclusive education: Secondary school teacher attitudes towards universal design for learning in Australia. *Australasian Journal of Special and Inclusive Education*, 47(1): 1-13.
- Chitiyo A 2022. Evidence based reading strategies for struggling readers. In:
- Chu MW, Craig HL, Yeworiew B, Xu Y 2020. Teachers' unpreparedness to accommodate student needs. *Canadian Journal of School Psychology*, 35(3): 210-224.
- Claudia B, Paun N 2024. The parental impact on education: Understanding the correlation between the parental involvement and academic results. *Acta Educationis Generalis*, 14(2): 16-26.
- Clearinghouse WW 2020. *What Works Clearinghouse Standards Handbook, Version 4.1*. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.
- Clemons L, Mason BA, Garrison-Kane L, Wills HP 2016. Self-monitoring for high school students with disabilities: A cross-categorical investigation of I-Connect. *Journal of Positive Behavior Interventions*, 18(3): 145-155. <https://doi.org/10.1177/1098300715596134>
- Cohen SR, Zeedyk SM, Tipton LA, Rodas NV, Blacher J 2016. Fathers of children with or without ID: Understanding long term psychological symptoms. *Journal of Intellectual Disability Research*, 60(4): 295-307.
- Conner J, Mitra DL, Holquist SE, Boat A 2025. How teachers' student voice practices affect student engagement and achievement: Exploring choice, receptivity, and responsiveness to student voice as moderators. *Journal of Educational Change*, 26(1): 89-118.
- Cole WM 2015. Mind the gap: State capacity and the implementation of human rights treaties. *International Organization*, 69(2): 405-441.
- Cooper C, Booth A, Varley-Campbell J, Britten N, Garside R 2018. Defining the process to literature searching in systematic reviews: A literature review of guidance and supporting studies. *BMC Medical Research Methodology*, 18(1): 85.
- Cosso J, von Suchodoletz A, Yoshikawa H 2022. Effects of parental involvement programs on young children's academic and social-emotional outcomes: A meta-analysis. *Journal of Family Psychology*, 36(8): 1329.
- Dart EH, Radley KC, Mason BA, Allen JP 2018. Addressing escape maintained behavior for students with developmental disabilities: A systematic review of school based interventions. *Psychology in the Schools*, 55(3): 295-304.
- Dettmers S, Yotyodying S, Jonkmann K 2019. Antecedents and outcomes of parental homework involvement: How do family-school partnerships affect parental homework involvement and student outcomes? *Frontiers in Psychology*, 10: 1048.
- Dong J, He Y, Jiang F, Liu Z, Ni Y, Tang Y, Huang Y 2024. Teacher-student relationships and mental disorders of undergraduate and graduate students in online education: A moderated mediation model of mobile phone addiction and hometown setting. *Computers in Human Behavior Reports*, 14: 100406.
- Dotterer A, Wehrspann E 2016. Parent involvement and academic outcomes among urban adolescents: Examining the role of school engagement. *Educational Psychology*, 36(4): 812-830.
- Duan S, Bissaker K, Xu Z 2024. Correlates of teachers' classroom management self-efficacy: A systematic review and meta-analysis. *Educational Psychology Review*, 36(2): 43.
- Emam MM, Al Mahdy YFH 2025. Exploring the role of school climate and self efficacy in fostering teacher com-

- mitment within inclusive education settings. *Psychology in the Schools*. 10.1002/pits.70091
- Erkenbrack M 2025. School-based parental involvement: Community and student outcomes. *The Sociological Quarterly*, 1-25.
- Garrote A, Felder F, Krähenmann H, Schnepel S, Sermier Dessemontet R, Moser Opitz E 2020. Social acceptance in inclusive classrooms: The role of teacher attitudes toward inclusion and classroom management. *Frontiers in Education*, 5: 582873. <https://doi.org/10.3389/educ.2020.582873>
- Ginja T, Chen X 2023. Conceptualising inclusive education: The role of teacher training and teacher's attitudes towards inclusion of children with disabilities in Ethiopia. *International Journal of Inclusive Education*, 27(9): 1042-1055.
- Gupta AK, Tandon B 2018. Attitude of teacher trainees towards inclusive education. *MIER Journal of Educational Studies Trends and Practices*, 17-28.
- Hennessy S, D'Angelo S, McIntyre N, Kooma S, Kreimeia A, Cao L, Zubairi A 2022. Technology use for teacher professional development in low-and middle-income countries: A systematic review. *Computers and Education Open*, 3: 100080.
- Holmes R, Reinke WM, Herman KC, Thompson AM, Danforth LE 2019. Family-school partnerships in tiered systems of support. In: S Andrew Garbacz (Ed.): *Establishing Family-School Partnerships in School Psychology-Critical Skills*. Routledge, pp. 42-64.
- Hong H 2022. Diagnostic evaluation and educational intervention for learning disabilities. *Journal of Medicine and Life Science*, 19(1): 1-7.
- Hott BL, Morano S, Peltier C, Pulos J, Peltier T 2020. Are students with mathematics learning disabilities receiving FAPE?: Insights from a descriptive review of individualized education programs. *Learning Disabilities Research & Practice*, 35(4): 170-179. <https://doi.org/10.5014/ajot.2019.73S1-PO1012>
- Khazanchi R, Khazanchi P 2020. Effective pedagogical practices in inclusive classrooms for students with disabilities. In: Ajay Singh, Mark Viner, Chia Jung Yeh (Eds.): *Special Education Design And Development Tools For School Rehabilitation Professionals*. IGI Global, pp. 38-60. DOI:10.4018/978-1-7998-1431-3.ch003
- Kimhi Y, Nir AB 2025, May. Teacher training in transition to inclusive education. *Frontiers in Education*, 10: 1510314. DOI:10.3389/educ.2025.1510314
- Koyuncu MK 2025. Time-travelling in philosophy of mathematics courses: From classroom to newsroom. *Education and Information Technologies*, 30(3): 3463-3489.
- Landmark, LJ, Zhang D, Ju S, McVey, TC, Ji, MY 2017. Experiences of disability advocates and self-advocates in Texas. *Journal of Disability Policy Studies*, 27(4): 203-211.
- Lam CB, Li X, Chung KKH 2024. Improving Chinese children's socioemotional competence, behavioral adjustment, and pre-academic skills: Impacts of the 3Es Program. *Early Childhood Research Quarterly*, 68: 13-23.
- Liu Q, Gao M 2022. Obstacles to parental involvement in children's education: New teachers' perceptions and strategies. *International Journal for Innovation Education and Research*, 10(2): 139-148.
- López Larrosa S, González Seijas RM, Carpenter JS 2017. Adapting the Unique Minds Program: Exploring the feasibility of a multiple family intervention for children with learning disabilities in the context of Spain. *Family Process*, 56(2): 423-435.
- López-Zamora M, Porcar-Gozalbo N, López-Chicheri I, Cano-Villagrasa A 2025. Parental stress, quality of life, and behavioural alterations in children with dyslexia. *Research in Developmental Disabilities*, 161: 105002.
- Martinez-Yarza N, Solabarrieta-Eizaguirre J, Santibáñez-Gruber R 2024. The impact of family involvement on students' social-emotional development: The mediational role of school engagement. *European Journal of Psychology of Education*, 39(4): 4297-4327.
- Mayes SD, Holdgraf M, Calhoun SL 2019. ADHD questionnaires and rating scales for children: A systematic review. *Journal of Pediatric Psychology*, 44(8): 977-989.
- McKenna JW, Flower A, Falcomata T, Adamson RM 2017. Function based replacement behavior interventions for students with challenging behavior. *Behavioral Interventions*, 32(4): 379-398.
- McCray ED, Bettini E, Brownell M T, McLeskey J, Sindelar P T (Eds.) 2024. *Handbook of Research on Special Education Teacher Preparation*. USA: New York Routledge.
- Morgan PL, Farkas G, Hillemeier MM, Mattison R, Maczuga S, Li H, Cook M 2015. Minorities are disproportionately underrepresented in special education: Longitudinal evidence across five disability conditions. *Educational Researcher*, 44(5): 278-292.
- Natale R, Kenworthy LaMarca T, Rahman T, Howe E et al. 2024. Using RE-AIM to assess infant early childhood mental health practices in classrooms serving children with and without disabilities. *Healthcare*, 12(24): 2501.
- Fleming E, Moore TH, Boutron I, Higgins JP, Hróbjartsson A, Nejtgaard C, Dwan K 2023 Using Risk of Bias 2 to assess results from randomised controlled trials: guidance from Cochrane. *BMJ Evidence-Based Medicine*, 28(4): 260-266. <https://doi.org/10.1136/bmjebm-2022-112102>
- Olvera P, Olvera VI 2012. Optimizing home-school collaboration: Strategies for school psychologists and Latino parent involvement for positive mental health outcomes. *Contemporary School Psychology: Formerly "The California School Psychologist"*, 16(1): 77-87.
- Omarkhanova A, Sugiralina A, Esbergen N 2024. Investigating the impact of parental involvement on student academic achievement. *Scientific-Pedagogical Journal "Bilim-Obrazovanie" of the National Academy of Education named after I. Al'tynsarin*, 109(2): 43-52.
- Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD et al. 2021. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372.
- Riden BS, Kumm S, Jolivet K 2021. Using technology to increase the use of evidence-based behavioral interventions with students with high-incidence disabilities. *Journal of Special Education Technology*, 36(3): 123-126.
- Sandro Misciagnap (Ed.): *Learning Disabilities: Neurobiology, Assessment, Clinical Features and Treatments*. IntechOpen, P. 283. <https://doi.org/10.5772/intechopen.100014>

- Savitri Jane, Setyono IL, Cahyadi, Surya, Srisayekti Wilis 2018. The role of parental involvement in student's academic achievement through basic needs satisfaction and school engagement: Construct development. In: Amarina Ashar Ariyanto, Hamdi Muluk, Peter Newcombe, Fred Piercy, Elizabeth Kristi Poerwandari, Sri Hartati Suradijono (Eds.): *Diversity in Unity: Perspectives from Psychology and Behavioral Sciences, Proceedings of the Asia-Pacific Research in Social Sciences and Humanities*, Depok, Indonesia, November 7-9, 2016: Topics in Psychology and Behavioral Sciences. 1st Edition. Routledge, pp. 255-263. 10.1201/9781315225302-32
- Schaarsberg REK, Popma A, Lindauer RJ, van Dam L 2022. The effects of a virtual reality-based training program for adolescents with disruptive behavior problems on cognitive distortions and treatment motivation: protocol for a multiple baseline single-case experimental design. *JMIR Research Protocols*, 11(5): e33555.
- Selçuk AA 2019. A guide for systematic reviews: PRISMA. *Turkish Archives of Otorhinolaryngology*, 57(1): 57.
- Smart D, Youssef, GJ, Sanson A, Prior M, Toumbourou JW, Olsson A 2019. Social mediators of relationships between childhood reading difficulties, behaviour problems, and secondary school noncompletion. *Australian Journal of Psychology*, 71(2): 171-182.
- Smith TE, Holmes SR, Romero ME, Sheridan SM 2022a. Evaluating the effects of family-school engagement interventions on parent-teacher relationships: A meta-analysis. *School Mental Health*, 14(2): 278-293.
- Smith TE, Thompson AM, Maynar BR 2022b. Self management interventions for reducing challenging behaviors among school age students: A systematic review. *Campbell Systematic Reviews*, 18(1): e1223.
- Varga PA, Hipkiss AM, Staf S 2023. Getting to grips with genre pedagogy-Mapping and analysing the recontextualisation of Sydney school genre pedagogy in the Swedish educational context. *Linguistics and Education*, 78: 101246.
- Vieira L Rohmer O, Jury M, Desombre C, Delaval M, Doignon-Camus N, Popa-Roch M 2024. Attitudes and self-efficacy as buffers against burnout in inclusive settings: Impact of a training programme in pre-service teachers. *Teaching and Teacher Education*, 144: 104569.
- Wildmon M, Anthony K, Kamau Z 2024. Identifying and navigating the barriers of parental involvement in early childhood education. *Current Issues in Education*, 25(1). 10.14507/cie.vol25iss1.2146.
- Wills HP, Caldarella P, Williams L, Fleming K, Chen PY 2023. Middle school classroom management: A randomized control trial of class-wide function-related intervention teams for middle schools (CW-FIT MS). *Journal of Behavioral Education*, 32(2): 189-211.
- Zach S, Yazdi-Ugav O, Zeev A 2016. Academic achievements, behavioral problems, and loneliness as predictors of social skills among students with and without learning disorders. *School Psychology International*, 37(4): 378-396.

Paper received for publication in August, 2025
Paper accepted for publication in December, 2025