

Teaching strategies for children with attention deficit hyperactivity disorder in English as foreign language classrooms

Estrategias de enseñanza para niños con trastorno por déficit de atención con hiperactividad en aulas de inglés como lengua extranjera

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ABSTRACT

This literature review focused on effective teaching strategies for children with Attention Deficit Hyperactivity Disorder (ADHD) in classrooms where English as a Foreign Language (EFL) is taught, which is undoubtedly a novel and crucial issue that demands immediate attention. This review not only concentrates on identifying the teaching strategies used for students with ADHD but also delves into and considers different teaching approaches and inclusive education adaptations for students with ADHD. The impact of this review might be significant for educators, parents, and stakeholders alike since it could provide valuable recommendations and knowledge based on the evidence gathered. This would lead to developing more effective, efficient, and inclusive teaching strategies or mechanisms for students with ADHD. Programs aimed at teacher training could also benefit from the findings of this review, contributing to the general support and improving the academic experience of students with ADHD in foreign language learning environments.

Keywords: Inclusive education; Teaching strategies for ADHD; Adaptations for ADHD learners; English as a Foreign Language; and Cognitive-behavioral interventions.

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RESUMEN

Esta revisión bibliográfica se ha centrado en las estrategias de enseñanza eficaces para niños con Trastorno por Déficit de Atención e Hiperactividad (TDAH) en aulas donde se imparte inglés como lengua extranjera (EFL), lo que sin duda constituye una cuestión novedosa y crucial que exige atención inmediata. Esta revisión no sólo se centra en la identificación de las estrategias de enseñanza utilizadas para alumnos con TDAH, sino que también profundiza y considera diferentes enfoques de enseñanza y adaptaciones de educación inclusiva para alumnos con TDAH. El impacto de esta revisión podría ser significativo tanto para los educadores como para los padres y las partes interesadas, ya que podría proporcionar valiosas recomendaciones y conocimientos basados en las pruebas recopiladas. Esto llevaría a desarrollar estrategias o mecanismos de enseñanza más efectivos, eficientes e inclusivos para los estudiantes con TDA/H. Los programas dirigidos a la formación del profesorado también podrían beneficiarse de los hallazgos de esta revisión, contribuyendo al apoyo general y a la mejora de la experiencia académica de los estudiantes con TDAH en entornos de aprendizaje de lenguas extranjeras.

Palabras clave: Educación inclusiva; Estrategias de enseñanza para el TDAH; Adaptaciones para alumnos con TDAH; Inglés como lengua extranjera; e Intervenciones cognitivo-conductuales.

Introduction

ADHD is a neurodevelopmental condition marked by enduring tendencies of inattention, hyperactivity, and impulsivity, which often pose difficulties in educational settings (Sarwar, 2023). Teaching children with ADHD correctly is essential in EFL classrooms, despite advances in educational research, there continues to be a relevant gap in both understanding and addressing the specific needs of children with ADHD in foreign language teaching environments (Drechsler et al., 2020).

According to McDougal et al. (2022), extensive research has been carried out on ADHD over the years; these studies include essential aspects of this disorder, such as its prevalence, etiology, and impact on various domains of functioning but translating this knowledge into practical strategies for educational settings, especially in foreign language learning, still needs to be bettered. In this sense, the evolving literature advises that traditional teaching methods may not correctly meet the necessities of students with ADHD, highlighting the necessity for targeted interventions and adaptations (Brussino, 2020). Moreover, although inclusive education has gained prominence in recent years, the specific application of inclusive practices in EFL classrooms for students with ADHD needs further advancement and dedication (Nigg et al., 2020).

It is worth mentioning that it is a priority not to overlook the vital role of research in teaching strategies for children with ADHD in EFL classrooms, children with ADHD often face unique challenges in learning, corresponding to their difficulties in attention, emotion regulation, and impulse control, which are made more complex due to their condition (Bonete et al., 2021). Taking

on these challenges requires evidence-based approaches that consider the cognitive and behavioral characteristics of ADHD by identifying and synthesizing effective teaching strategies (Lambez et al., 2020). This review seeks to inform educators, policymakers, and researchers about best-reported practices for supporting the academic success and socio-emotional well-being of children with ADHD in foreign language learning contexts.

The primary objective of this synthesis is to examine and analyze existing research on teaching strategies used in EFL classrooms for children with ADHD by utilizing all the empirical evidence, theoretical frameworks, and practical insight under a relative control frame.

This research focused on identifying teaching strategies adapted to the needs of children with ADHD in English classrooms. It also aims to look at the impact of these strategies on topics such as academic performance, language proficiency, and socio-emotional development. Overall, the review strives to advance inclusive and effective educational practices for children with ADHD in the context of foreign language learning; these findings provide a roadmap for educators and policymakers to implement evidence-based strategies and interventions, thereby improving the educational outcomes and well-being of children with ADHD in EFL classrooms as detailed by Domsch et al. (2022).

As mentioned by Domsch et al. (2022), it delves into two essential aspects to understand the education of children with ADHD: educational psychology and instructional design; these two aspects influence learning processes and academic performance.

Woolfolk (2019), highlights that cognitive development theory describes four stages in constructing knowledge and understanding of the world. This theory contributes significantly to the covered topic; although it does not directly address ADHD, it serves as a framework for understanding how children with ADHD learn differently; contemplating these challenges allows educators, parents, and stakeholders to provide unique supports and accommodations for these children (Woolfolk, 2019).

According to McDougal et al. (2022), educational interventions and instructional design focus on evidence-based strategies customized for children with ADHD; these include classroom accommodations, instructional modifications, and teaching strategies such as attention and focus techniques using short-focused activities with breaks and employing methods like chunking information and visual aids. The authors mentioned that it helps with the structure and organization by establishing predictable schedules, utilizing visual cues, and implementing organizers to enhance organization and time management.

The present research underscores the importance of positive reinforcement and support. By implementing these strategies, desired behaviors in children with ADHD can be effectively shaped and reinforced, leading to significant improvements in their academic and social-emotional

development (Woolfolk, 2019). Importantly, the need for open communication between teachers, parents, and children, ensuring that everyone's voice is heard and valued in the process is highlighted. According to Woolfolk (2019), modifications and personalized teaching strategies are vital so that the diverse needs of children with ADHD are met in the classroom. By creating organized environments, promoting interactive participation, providing differentiated instruction, and providing positive support, which includes praising good behavior and providing constructive feedback, teachers can establish inclusive teaching environments, thereby leading to the academic and social-emotional development of children with ADHD (Woolfolk, 2019).

Methodology

For this synthesis on accurate and efficient teaching strategies for children with ADHD in EFL classrooms, databases like ERIC, PsycINFO, PubMed, and Education Source were primary sources utilized as they tend to be at the vanguard of research. Google Scholar was the medium to supplement the search with various bibliographic and academic publications. As mentioned earlier, the databases provided peer-reviewed literature on inclusive training and specific strategies for students with ADHD in English as a foreign language environment, which leads to the purpose of the research.

Utilizing a range of tools, including strategy charts, comparison charts, and visual representations, the results were succinctly summarized descriptively across the investigated topics. This diverse array of mechanisms ensured accuracy and consistency throughout the article, amplifying its impact on readers and those who implemented them.

The selection guidelines for searching the literature on effective teaching strategies for children with ADHD in EFL classrooms were supported based on the following factors:

- Type of article: Various potential resources for the review analysis.
- Publication Date: Articles published between 2019 and 2024 were considered to keep up with the newest techniques and information on the topic.
- Publication Type: This synthesis included scholarly articles and excluded conference papers and authors based on their techniques on subjective matters rather than investigation.
- Language: English, in nature, was the only language used for all sources. Great exponents of Spanish-speaking countries were not included in this report.

Development

ADHD in the classroom

According to Segotso (2020), ADHD is a disorder that requires a thorough diagnostic assessment due to overlapping symptoms with other disorders; its symptoms can emerge gradually, with hyperactivity often preceding inattention also, this disorder affects the brain's executive function, impacting planning, organization, and behavior regulation. Segotso (2020), claims that while students with ADHD often present problem-solving abilities, they also have a hard time managing time, staying consistent, and regulating their emotional side.

According to her, challenges in self-control among students with ADHD are neurological; using structured approaches, rewards, and external guidance has been an excellent means to fight some of the urges associated with children with ADHD. She also discusses that the disorder changes over time; hyperactivity may decrease while attention issues worsen as time goes by, affecting academic and social interplay and performance. Segotso (2020), states that educators can address these challenges by integrating tailored educational practices, including behavioral interventions and classroom accommodations, and combining these strategies with regular classroom activities may help educators effectively teach students with ADHD.

Socioemotional well-being of children with ADHD

Bell's (2023), research shows that a standard treatment for children with ADHD includes the integration of behavioral interventions and regularly displaying behaviors typical of younger ages than what they have; those with ADHD may struggle with age-appropriate actions and the build-up of their personalities. ADHD can influence their ability to form friendships and grasp social consequences (Bell, 2023).

In Pandey and Gupta's (2023), opinion, intervening in behavior motivates behaviors in the individual learning of the student and their classmates. They analyze that a well-managed classroom will reduce disciplinary problems with students who experience ADHD and their classmates, who play an essential role in those with ADHD every day in their classroom. Therefore, behavioral interventions should be taken seriously and seen as a tool for efficient and effective teaching rather than mere disciplinary measures (Pandey & Gupta, 2023).

Effective behavioral intervention techniques

As stated by Barkley (2020), children with ADHD frequently show behavior that is not appropriate for their age and are in a continuous struggle to control hyperactivity. Behavioral interventions are intended to help these students exhibit behaviors focused on learning, where the beneficiaries are not only them but also their classmates (Barkley, 2020).

Segal and Smith (2024), suggest that a properly managed classroom lowers disciplinary issues and supports a better learning environment; teachers who are less busy monitoring off-task behaviors serve all students more effectively. In this way, behavioral interventions should be seen as opportunities for appropriate teaching, not punishments (Segal & Smith, 2024).

Verbal Considerations

As highlighted by Hagstrøm et al. (2020), educators who possess a deeper understanding of this subject matter are equipped with a range of strategies to manage student behavior; these strategies include verbal reinforcement, praise, and being pivotal. These researchers recommend using a simple phrase like *good job*; as it can significantly motivate students since it is crucial to consistently give props to everyone when they are acting upon something they should or simply doing what they are supposed to do; this applies to all students, not only those with ADHD, and promptly acknowledge positive behavior. From the point of view of Hagstrøm et al. (2020), when «praising», specificity is essential: clearly describe the positive behavior and highlight it to the other classroom members for it to be replicated. Hagstrøm et al. (2020), emphasize that praise should be delivered immediately after the appropriate behavior to reinforce and encourage repetition; to maintain their impact, the praise statements should be varied, as repeated use of the exact phrase can decrease effectiveness.

As explained by Barkley (2020), it is worth mentioning that compliments should often come from a genuine place. He also explains that genuine and consistent reinforcement of desired behaviors avoids cognitive dissonance in children, particularly for students with ADHD; sincere praise is more likely effective, as students can feel through words and explore the meaning and sentiment behind what is said to them, punishment should be avoided until the very last and applied in particular instances. While punishments may temporarily alter behavior, they often fail to change attitudes and can reinforce misbehavior by being present in students prone to disruptive behavior; in contrast, positive reinforcement fosters lasting behavioral changes by shaping attitudes positively (Barkley, 2020).

Nonverbal

According to Jose (2021), effective behavioral interventions for students with ADHD encompass a range of nonverbal techniques; some of these techniques include selective ignoring, where activities or actions can be tolerated as the threshold for disruptiveness has been reached. To further help with focus, Jose (2021), suggests that any distractions should be immediately hidden and prohibited during class hours, including phones, toys, etc.; this allows students an opportunity to put them away before the class starts; incorporating short breaks or simply teacher-student interaction with topics that awaken students' interest helps students to concentrate, running an errand can also help students refocus (Jose, 2021).

Jose (2021), suggests that to motivate students with ADHD, less preferred tasks can be encouraged before preferred ones; this approach, known as activity reinforcement, can be an additional hurdle-powerful tool. Likewise, helping to overcome obstacles, which involves providing students with additional support or resources so that feelings of hopelessness and frustration with the task in front of them do not occur, is another efficient strategy (Jose, 2021).

According to Pandey and Gupta (2023), non-verbal strategies such as meditation, body language, and biofeedback, together with a professional support team, are a strategic resource to build a lasting relationship that meets the needs of children with disabilities. ADHD. Expert support could positively influence students' behavior (Pandey & Gupta, 2023).

Prompts

According to Segal & Smith's (2024), report some teachers use behavioral prompts to maintain student learning and behavior effectively; these instructions incorporate visual and physical stimuli, such as smiling or holding hands, as a reminder to students, this achieves a feeling of support and reminds them of the task.

The authors emphasize proximity control, which is vital here as it involves standing or sitting closer to the student when addressing them, which improves their understanding and concentration. Similarly, hand gestures such as making a fist to indicate «I know the answer» and an open palm to indicate «I do not know» could be used in private media, for example, in one-on-one meetings with students (Segal & Smith, 2024).

Self-management

Koi (2020), mentioned that to put self-management into practice in children with ADHD, a commitment between educators, parents, and friends is necessary to encourage this practice; this would be beneficial in learning self-control techniques to improve their behavior. There are two practical approaches: (1) offer structured social skills classes where children can discern which ones are appropriate and (2) how to act by involving role-play activities that resonate with everyday life and provide opportunities to apply these skills in real-life situations. (Koi, 2020).

As Shrestha et al. (2020), highlight, implementing this type of class for all students can enrich the school environment and the student's personal, academic, and professional growth. It also facilitates problem-solving sessions where children's social conflicts between students and their relationships with parents are addressed, encouraging children involved in some disputes to communicate and find solutions under supervision (Shrestha et al., 2020). Sarwar (2023), points out that students should be trained to monitor and evaluate their behavior without constant teacher feedback.

Galkiene and Monkeviciene (2021), maintain that, in a typical self-management system, the teacher identifies behaviors that will be managed by a student and provides a written rating scale that includes the performance criteria for each rating; the teacher and student separately rate the student's behavior during an activity and compare ratings. The student earns points if the ratings match or are within one point and receives no points if ratings are more than one point apart; points are exchanged for privileges; with time, the teacher involvement is removed, and the student becomes responsible for self-monitoring (Galkiene & Monkeviciene, 2021).

Functional behavioral assessments (FBA) and positive behavioral interventions and supports (PBIS)

For children with ADHD, Barkley (2020), describes various behavioral interventions as crucial to managing their actions and overall behavior. Here are the fundamental techniques and their applications:

FBA is a systematic process that identifies problematic behaviors and their triggers, leading to the development of targeted intervention plans. PBIS aims to create supportive environments and change problematic behaviors to positive ones; these interventions offer a path toward the individual's growth in all three aspects: educational, professional, and personal, as detailed by (Barkley, 2020).

As Ofojebe and Uzoekwe (2021), suggest that behavioral contracts and management plans are effective tools for specifying academic or behavioral goals, such as completing homework on time. A syllabus plan should be created with the input of the child and parents to ensure that the content will be something that the children are interested in learning about (Ofojebe & Uzoekwe, 2021).

As mentioned by Hagstrøm et al. (2020), a simple appliance to reward proper behavior can be giving out stickers or special privileges to those students showing excellent behavior, involving children in selecting their rewards can increase their motivation «token economy» systems reward students with points for meeting behavioral goals; which can later be exchanged for rewards and applied to individual students or entire classrooms. Self-reflection systems train students to monitor and evaluate their behavior independently, with teachers initially providing feedback using a rating scale as students gradually take on self-monitoring responsibility (Hagstrøm et al., 2020).

Academic performance

Successful Classroom Management for Children with ADHD includes the following: (1) Academic instruction and (2) Classroom accommodations (Humphrey et al., 2022). This is an important topic to be considered for this synthesis.

Implementing effective academic instruction for children with ADHD

Shrestha et al. (2020), state that quality academic instruction is essential in practical instruction for children with ADHD; educators can increase student readiness and performance by applying practical teaching principles during «lesson introduction, development, and conclusion». The immediate step focuses on the «general instructional process in all subject areas», with mechanisms linked to the «individualization of instructional practices» (Shrestha et al., 2020).

Implementing lessons

In the opinion of McDougal et al. (2022), teachers should have a structured main purpose, clearly determining the day's objectives, linking them directly to their previous learning, and creating high expectations for training and behavior. Essential practice includes using advanced organizers that allow students to recall knowledge from previous lessons, summarize the day's activities based on reading stories, and recognize new terminology (McDougal et al., 2022).

According to its criteria, another of its uses is for the teacher to specify the materials needed, describe the behavioral expectations, and serve as a guide to the students so that they can find a solution that ensures that the instructions and abilities will be wholly tolerable, and this will guarantee timely support in students who have ADHD. Coordination and structuring are two fundamental points in children with ADHD that should be focused mainly on a clear perspective and with high hopes to reduce the changes and the proposed options (McDougal et al., 2022).

As mentioned by Jornevald et al. (2023), in the classroom, teachers should provide careful guidance to encourage support among students, it is considered entirely offensive to mimic or tease students with ADHD, and it is advisable to avoid sarcasm and insulting criticism. As the researcher said, it has been shown that a valuable and necessary tool that could benefit these students is the integration of technological instruments that positively encourage interactive lessons. For the evaluation and feedback process, teachers must identify that students have grasped the message provided through the clarification of doubts and problem-solving or by asking them to wait at least 15 seconds between the intervals of each question so that they can process the information in the brain properly (Jornevald et al., 2023).

Jorneval et al. (2023), emphasize the importance that continuous assessment of students is essential to identify those who have certain difficulties or obstacles in learning and understanding the topics, and it would be chosen to provide them with an additional benefit or tutoring. It is also vital to teach self-correction skills, such as checking calculations or spelling (Jornevald et al., 2023).

Galkiene and Monkeviciene (2021), in their research state that various practical strategies for carrying out tasks rely on assigning study partners or offering concentration reminders through monitoring exercises so that students with ADHD complete their responsibilities; if necessary, verbal and written instructions can be provided under appropriate follow-up to manage levels of care.

Based on Mezzanotte (2020), the teacher should break down the tasks into smaller, easier-to-solve tasks so that the student feels comfortable and less overwhelmed. As indicated by Staff et al. (2023), the use of teaching materials plays a fundamental role in studying, especially underlining key points and writing them down on a sheet to help in the process of concentration; on the other hand, the elimination or reduction of scheduled tests would contribute to the reduction of anxiety problems before an exam. Alternative evaluation methods should be chosen to encourage teamwork to achieve mutual support, and the implementation of assistive technology tools, such as PDAs and projectors, can encourage students to participate actively (Lozano-Álvarez et al., 2023).

In consonance with Hornstra et al. (2022), at the end of classes, children with ADHD need to be notified about 5 to 10 minutes before and constantly reviewing the assignments of students with ADHD would help the teacher to know and assess the level of readiness and better execute future lessons. In addition, it is key to guide students toward the next activity so that they do not interfere with the administration of the course (Hornstra et al., 2022).

Instructional process across subject areas

Brussino (2020), stated that effective teachers adapt their teaching methods to meet the individual needs and themes of students with ADHD; they recognize that these students learn differently, identify areas that need additional support, and use specialized strategies to reinforce previously learned lessons. Below are topic-specific strategies to help teachers implement this approach to support the academic development of children with ADHD; different individualized strategies can be applied to different subjects and abilities, as Brussino (2020), mentions, in order to improve reading comprehension, set times each day, such as «Drop Everything And Read (DEAR)» or «Silence Sustained Reading (SSR)» and encourage children to continue reading quietly while listening to the story; likewise, pairing children with good reading peers for shared reading sessions, creating visual graphic themes, and organizing storytelling and acting sessions could be very beneficial. Maintaining a library of challenging vocabulary, using computer or board games, and using audiobooks can complement reading efforts (Brussino, 2020).

Teaching mnemonics and practicing phonics word groups, such as «when two vowels sound, the first vowel speaks», will reinforce phonetic concepts; board games focusing on sounds, computer exercises, and letter images help with learning, especially for children who recognize sounds but have trouble recognizing letters (Brussino, 2020).

Brussino (2020), said teaching grade patterns and using storyboards as a visual tool can provide a structured framework for writing. Create a class log that helps students re-examine paragraphs and encourages self-assessment through revision checklists to improve understanding and organizational skills; storytelling and computer dictation significantly improve oral and written communication skills. (Brussino, 2020).

As Brussino (2020), points out, learning the context and frequently used spelling words can improve spelling correlation and application; visual aids such as personal spelling dictionaries promote peer learning; manipulative technology and color compilation help maintain memory and visual recognition, movement-based spelling activities and organized word banks provide a structured approach to revision.

Introducing quiet areas and individualized erase boards for handwriting could improve writing skills; writing difficulties can be addressed by instructing spacing techniques, providing specialized writing paper, and implementing structured handwriting programs such as «handwriting without tears» (Brussino, 2020).

In Brussino's opinion (2020), implementing pattern recognition techniques and promoting collaborative learning through peer work can improve basic mathematical skills and understanding of mathematical symbols; using mnemonics to improve memory and using practical money-related skills would improve understanding and memory. For interactive and engaging learning opportunities, propose calculator exercises, include educational board games, and create daily magic minutes exercises (Brussino, 2020).

Brussino (2020), advocates for a teaching approach that stimulates students with ADHD through thought-provoking questions and encourages them to create and solve problems related to their own experiences; this method provides a meaningful context and realistic practice, fostering active engagement and practical application of knowledge.

Finally, Brussino (2020), suggested that particular tools, such as digital graphs, manipulatives, and graph paper, benefit children with ADHD in different subjects by helping them visualize providing hands-on learning experiences; by using these specific tools, teachers and parents can create a supportive learning environment that meets the individual needs of children with ADHD and promotes academic success and confidence in various subjects. (Brussino, 2020).

Individualizing instructional practices

To support the development of skills and abilities of students with ADHD, it is necessary to implement various study strategies; one of these is to appoint teachers to act as guidance counselors in monitoring and assessing children's progress to facilitate communication networks between teachers and parents through regular planning and review meetings (Bolinger et al., 2020). On the other hand, to maintain an organized study space, it is necessary to link children with ADHD with their peers to encourage the cleaning and disinfection of desks (Galkiene & Monkeviciene, 2021). Classroom visual aids, such as posters and charts, can reinforce learning materials and support understanding (Farhangnia et al., 2020).

Teaching the child to use a clock, either embedded in the wall or a wrist clock, would help them manage time in a better way; the use of a calendar is also necessary to organize tasks so that the child can prioritize both time and deadline (Shrestha et al., 2020).

As Mezzanotte (2020) highlights, asking one question at a time and using Venn diagrams could significantly improve concentration and reduce anxiety. Venn diagrams effectively connect primary concepts in all fields of study; also, teaching children to take notes and use tools based on "school success skills" could improve their learning experience (Mezzanotte, 2020).

Van Der Oord and Tripp (2020), provide techniques for monitoring errors in tasks performed in the classroom so that students can self-correct them. The teacher must ensure that all the supplies necessary for the tasks are available. In addition, the teacher would have to carry out a continuous review of the assigned tasks to verify the students' performance. Collaboration with parents is essential to address various issues; instead of introducing new concepts through homework, it is essential to reinforce the material learned.

Classroom accommodation and modification techniques for students with ADHD

Per Pritchard et al. (2019), helping students with ADHD in the school environment requires addressing their challenges related to classroom structure and distractions. Implementing specific adaptations would significantly reduce distractions and improve attention (Pritchard et al., 2019).

Segal & Smith (2024), recommend the following instructions: first, reducing visual and auditory stimulation in the classroom helps create a more conducive learning environment, second creating a straightforward routine and visual charts can help students understand and meet class requirements more effectively.

Finally, with quiet study areas or those that provide focused workspaces, students with ADHD can focus more effectively on their tasks (Segal & Smith, 2024).

Classroom seating strategies for ADHD students

Szep et al. (2021), suggest that providing appropriate classroom seating for students with ADHD becomes an effective support strategy for these students. Furthermore, Szép et al. (2021), suggest the following guidelines: placing children near the teacher's desk or at the front of the classroom will help them better control their attention while ensuring that their classmates' vision is not blocked, creating an environment suitable for maintaining concentration, placing the child next to a peer who demonstrates good behavior can encourage collaborative learning and offer a positive peer influence, taking advantage of the advantages of modeling appropriate behaviors. Likewise, establishing a quiet study area free of distractions is beneficial for focused study and exams, it is critical to discreetly direct students toward this area to prevent it from being perceived as a punishment, ensuring that it is seen as a supportive resource rather than a consequence (Szép et al., 2021).

Tools for Classroom Accommodation

Shrestha et al. (2020), stated that teachers have devised various tools and strategies to renew the educational environment for students with ADHD; providing advice can be a practical mechanism for visually following text during classroom discussions or reading activities.

Timers should be set to mark the beginning and end of lessons, this helps students manage their time better, and tasks can also be divided into more manageable chunks, which will help students stay focused throughout the session (Shrestha et al., 2020).

Spina (2021), specifies the following accommodations: for showing changes in noise levels or transitions between different activities to adjust classroom lighting; for example, lights can be turned on or off to calm students down or prepare for the next assignment. Background music can also effectively control the energy in the classroom, establishing an appropriate tone for the activities, classical music is appropriate for independent tasks, and more upbeat jazz may be more suitable for group activities (Spina, 2021). However, it is essential to remember that music can sometimes distract students; the teacher should ensure that desks and chairs are appropriate for students with ADHD, so it is decided to use ergonomic furniture that can minimize discomfort and restlessness, an easy guideline to follow is that a child should be able to rest their elbows on the desk surface with their chin fitting comfortably in their hand (Spina, 2021).

Analysis

Table 1. Social-emotional well-being of children.

Intervention Techniques	Strategies	Author/Year	Number of articles	Percentage
Behavioral	Verbal, nonverbal, and prompts	Barkley, 2020; Hagstrøm et al., 2020; Jose, 2021; Pandey & Gupta, 2023; Segal & Smith, 2024	5	41.67%
	Self-management	Galkiene & Monkeviciene, 2021; Koi, 2020; Shrestha et al., 2020; Sarwar, 2023	4	33.34%
	Functional Behavioral assessments (FBA) and Positive Behavioral Interventions and Supports (PBIS)	Barkley, 2020; Hagstrøm et al., 2020; Ofojebe & Uzoekwe, 2021	3	25%
Total			12	100%

Source: Own Elaboration.

Within the technique «behavioral», the strategy of integrating «verbal, nonverbal, and prompts» is a key focus in 41.67% of the articles (Barkley, 2020; Hagstrøm et al., 2020; Jose, 2021; Pandey & Gupta, 2023; Segal & Smith, 2024). Indicating its widespread recognition and study in the context of promoting social-emotional well-being in children with ADHD. A notable result found is that behavioral regulation improves class participation, achieved by incorporating verbal and nonverbal instructions and adapting them to the unique needs of children with ADHD.

Barkley's (2020), research highlights the crucial role of personalized verbal instructions for children with ADHD. These instructions, tailored to the individual's needs, guide them through tasks and activities, fostering their engagement and comprehension. Additionally, Barkley (2020), advocates using nonverbal instructions, such as visual aids, to enhance understanding and participation.

On the other hand, Hagstrøm et al. (2020), focus more on using non-verbal gestures as complementary communication tools for children with ADHD. They maintain that the use of gestures, facial expressions, or body language significantly influences the improvement of understanding and participation of children with ADHD in the classroom. In this regard, Jose (2021), agrees with using non-verbal techniques, just as Barkley (2020), agrees with using visual aids. However, Jose (2021), with a more technological approach, proposes using mechanisms, multimedia whiteboards, audio recordings, and sensory tools to facilitate the learning of children with ADHD and thus also regulate their behavior, the union of several aids visual, auditory, and tactile; facilitates attention regulation and results in better behavior in children with ADHD.

Hagstrøm et al. (2020), mention the value of incorporating activities that involve movements and signals, serving as kinesthetic learning mechanisms to support children with ADHD. The authors highlighted it has proven to be beneficial in enhancing ADHD students' learning experience. Furthermore, another major insight stated by Hagstrøm et al. (2020), is that combining verbal and nonverbal instructions and prompts helps children with ADHD achieve optimal learning outcomes; this approach will significantly improve academic performance and behavioral regulation.

Pandey and Gupta's (2023), lean more towards using all three types of instructions (verbal, nonverbal, and prompting) as a comprehensive teaching framework for children with ADHD. They discovered that articulating these instructions promoted good learning results for children. In the same vein, Segal and Smith (2024), corroborate these findings and mention these three instructions will provide correct guidance on creating an optimal learning environment for children. Segal and Smith (2024), also maintain that self-regulation and independence will be encouraged when using these strategies.

Alternatively, Pandey and Gupta (2023), stated that implementing these strategies and the collaboration of teachers, parents, and other interested parties is not just beneficial, but essential. The authors also suggest that this collaboration accompanied by continuous teacher training, will guarantee correct execution based on the individual needs of students with ADHD. Additionally, Segal and Smith (2024), underscore the importance of the audience's role in the ongoing support and development of children with ADHD.

Table 2. Academic performance.

Intervention Techniques	Strategies	Author/Year	Number of articles	Percentage
Academic Instruction	Lessons	Galkiene & Monkeviciene, 2021; Hornstra et al., 2022; Jornevald et al., 2023; Lozano-Álvarez et al., 2023; McDougal et al. (2022); Mezzanotte, 2020; Staff et al., 2023.	7	41.18%
	Instructional process across subject areas,	Brussino, O. 2020.	1	5.89%
	Individualizing instructional practices	Bolinger et al., 2020; Farhangnia et al., 2020; Galkiene & Monkeviciene, 2021; Mezzanotte, 2020; Shrestha et al., 2020; Van Der Oord & Tripp, 2020.	6	35.29%
Classroom Accommodations and Modifications Techniques	Classroom seating strategies	Szép et al., 2021.	1	5.89%
	Tools for classroom accommodations	Shrestha et al., 2020; Spina, 2021.	2	11.76%
Total			17	100

Source: Own Elaboration.

Within the technique of «academic instruction», most articles (41.18%) prioritize using «lessons» as a primary strategy for bettering academic performance in children with ADHD (Galkiene & Monkeviciene, 2021; Hornstra et al., 2022; Jornevald et al., 2023; Lozano-Álvarez et al., 2023; McDougal et al. (2022); Mezzanotte, 2020; Staff et al., 2023). This suggests a significant focus on the content and delivery of instructional material to support learning outcomes.

The approach mentioned above, tailored to the unique needs, and learning styles, can foster greater student participation and, consequently, improve classroom performance. Galkiene and Monkeviciene (2021), echo this sentiment in their research, underlining the necessity of personalized and engaging lessons to cater to the diverse learning styles of children with ADHD; they also stress the importance of interactive teaching methods to enhance participation and comprehension. Similarly, Mezzanotte (2020), concurs that prioritizing lessons as a main strategy can boost academic performance in children with ADHD; she further emphasizes the need for lessons to be customized to the unique needs of children with ADHD, and for educational material to be delivered in a timely manner, fostering inclusive and supportive learning environments for these students.

Concerning lessons taught in different subject areas, Jornevald (2023), states that lessons should be conceived holistically; she proposes advocating for routines and lesson plans in a structured way in different subjects to help students with ADHD stay focused and understand teachers' expectations. Consequently, the author proposes innovative teaching approaches that are in line with the specific learning needs of children with ADHD. This approach may lead to improved academic performance and the maintenance and enhancement of students' engagement and participation. Similarly, Staff et al. (2023), express that lessons should emphasize teaching methods and instruction techniques that are novel; in this way, commitment and participation in the classroom could be maximized. Hornstra (2022), agrees on innovative teaching approaches so that they address the amalgam of learning needs of students with ADHD; a core point that Hornstra (2022), indicates is to focus on the content and timely delivery of educational material, with this not only learning outcomes are supported if not children's academic performance is also improved. In this sense, proper lesson planning and delivery are crucial to sustaining and assisting the academic success of students with ADHD.

Regarding the correct planning and execution of lessons, Lozano-Álvarez et al. (2023), highlight the crucial role of educators, which will support the academic success of children with ADHD. It recommends that teachers use the best methods and update themselves on the best teaching practices and actions to meet the needs of the entire universe of students, including those with ADHD; this emphasis on the educator's role empowers them and highlights their responsibility in creating inclusive learning environments.

McDougal et al. (2022), agree that the lessons should be effectively planned and that it is essential to adopt the best practices and interventions in teaching; these practices should be based on evidence that shows that they are optimal for improving the results of the lesson learning of students with ADHD.

Finally, it was noted that although each study approaches the topic of «lessons» from different angles as an efficient strategy for teaching children with ADHD, they all agree on a common goal: improving academic performance and creating learning environments that support all students, especially children with ADHD. This reiteration of the common goal not only unites the audience but also keeps them focused on the ultimate aim of their work.

Within the technique «classroom accommodations and modifications techniques», the «tools for classroom accommodations» represent 11.76% of the articles (Shrestha et al., 2020; Spina, 2021). This strategy emphasizes the importance of creating an environment so that children with ADHD are prone to learning; from this result, the following deductions can be issued: the teacher's decision to adopt the strategy tools for classroom accommodation depends on a dynamic process unique to each teacher; some prefer tangible tools for a specific intervention, while others may choose to integrate adaptations into the overall classroom structure.

Shrestha et al. (2020), underscore the significance of employing specific tools and techniques to transform the learning environment into a haven for children with ADHD. Similarly, Spina (2021), advocates for adaptations in daily classroom activities, highlighting their practicality and the active role of teachers in tailoring lessons to the needs of students with ADHD.

There is a promising shift toward taking advantage of sensory and technological tools to improve learning experiences and adapt to the various needs of the classroom of children with ADHD. As mentioned by Shrestha et al. (2020), these tools, such as headphones and cushioned seats, aim to maintain concentration and reduce sensory overload, offering a new avenue for effective teaching. On the other hand, Spina (2021), further explores technological tools, such as educational applications or software designed to create a more attractive learning experience for children in school, sparking optimism about the potential of these tools in the classroom.

The high importance of educators' professional development can be inferred. As mentioned by Shrestha et al. (2020), it is important to train teachers to recognize ADHD and implement adaptations in the classroom. Likewise, Spina (2021), analyzes the challenges facing the implementation of the tool strategy for adaptations in the classroom, such as resource limitations or resistance to change within educational systems.

Both authors highlight the importance of promoting and disseminating this strategy for students with ADHD. Shrestha et al. (2020), focus on evidence-based support for implementing specific adaptations, advocating for a structured approach. Spina (2021), advocates for flexibility in strategy implementation based on the needs of each student rather than a one-size-fits-all solution. However, the authors differ a little in their proposals.

It is found that there is increasing recognition of the need for policy changes in education systems to ensure that educational environments are inclusive and suitable for all students, including those with ADHD.

Conclusion

This literature review has embarked on a still-developing field that aims to obtain better strategies for children with ADHD in EFL classrooms. It has offered invaluable insights into how socio-emotional well-being and academic performance impact this group of students. As mentioned, it is worth noting that there is still a lot to cover in the field of children with ADHD and their struggles with learning a foreign language. Many studies are context-specific, limiting the number of confounding factors. This could be seen as a good thing because of the analyses and ways of limitations by working with staff members, especially on teacher training, developing evidence-based practices, promoting inclusive policies in schools, and the integration of technology and the impacts that it could have, it is a must to conduct further research on this.

To conclude the research highlights the significant weight of inclusive academic strategies on the socio-emotional well-being and academic performance of children with ADHD in classrooms of English as a foreign language. The contrast of various teaching approaches emphasizes the importance of personalized interventions to create supportive learning environments that meet the varied needs of students with ADHD and ultimately promote their overall development and success.

While this literature review might have enriched our understanding, addressing these context-dependent limitations through future research will enable us to develop more effective strategies for supporting children with ADHD in their social-emotional well-being and academic performance in EFL classrooms and achieve more tailored strategies for educators.

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