

# The Influencing Factors of Bilingualism on College Students with ADHD

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**Abstract:** The effect of bilingualism in college students with Attention-Deficit/Hyperactivity Disorder (ADHD) is a field that is gradually becoming popular in institutions that study education and cognition. Although there is a paucity of empirical research done on this intersection specifically, the available body of research offers much to be considered with respect to how bilingualism can alter the cognitive functioning, academic achievement, and learning process in students with this disorder. The needs of more than one or two languages might bring more problems regarding paying attention, organizing information, and processing for some people (Williams et al.,2023). Bilingualism can also bring increased executive functioning to others, increased flexibility in their thought process, and a better understanding of other cultures.

Bilingualism has various outcomes on different individuals depending on several factors, among them being the degree of linguistic knowledge, the aging of the acquisition of languages, the languages in question, and the severity of ADHD symptoms (Zheng et al.,2025). These aspects are connected with each other in a complex manner and identify the means of acquisition and learning, school-related problems, and individual success of bilingual students with this disorder.

This research reviews the recent literature that concerns the potential benefits and challenges of bilingualism to this category of individuals. It highlights the need for personalized instructions and the need for additional targeted research in order to better understand the outcomes of bilingualism on the cognitive and academic developmental journey of college students with this disorder.

**Keywords:** college students, Attention-Deficit/Hyperactivity Disorder (ADHD), study education.

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## 1. INTRODUCTION

Neurodevelopmental Attention-Deficit/Hyperactivity Disorder (ADHD) is a disorder, in the framework of which the person is exposed to chronic multifocal inattention and impulsiveness with hyperactivity features, which disrupts functioning or developmental process (Rafailov, 2024). There are also students with the disorder in colleges, and this is evident in the fact that students have a hard time focusing during lectures, have problems organizing work and time, and react emotionally to obstacles in school work. It may also have an adverse impact on learning, social behavior, and psychology. With the growing access of individuals with ADHD to higher educational institutions, their level of awareness about the need to identify the nature of the correlation between the condition and other mental and environmental processes is on the rise.

One more critical and complicated cognitive phenomenon is bilingualism, which is the use and alternation of two or more languages. Bilinguals are usually forced to deal with competing language systems, generating a significant need for cognitive control, working memory, and attention control (Watson & Westby, 2025). The studies reveal that bilingualism can have several impacts on other aspects of the mind, such as executive functioning, mental flexibility, and metalinguistic awareness. The cognitive areas impacted in individuals with the disorder are, to a great extent, overlapping with these areas, and therefore bilingualism and ADHD are the hot issues to investigate.

It is essential to gain insight into the interaction between bilingualism and ADHD and into higher education. In regular college students, this disorder presents distinctive educational and social problems. Still, in the case of bilinguals, the combination of their language skills and their cognitive profiles may have the effect either of alleviating or aggravating the presence of these problems (Zheng et al.,2025). Some studies indicate that bilinguals have increased executive control because they are forced to switch languages regularly and filter out irrelevant information. This may be helpful to students with ADHD, as they are usually caused by poor executive function. Nevertheless, other results show that bilingualism can lead to more cognitive load and add some burden to attention and memory, particularly in cases of less proficiency with speech or development and language of postponed learning. These ambivalent results give an idea of the importance of investigating this issue in a nuanced manner.

This research aims to investigate the effects of bilingualism on the cognitive processes and academic life of college students with ADHD. Namely, in this investigation, the recent literature is reviewed to outline the positive and negative aspects that bilingualism may bring to this audience (Zheng et al.,2025). It seeks to determine how bilingualism will enhance or complicate academic success, emotional adaptation, and cognition among children with this disorder. Investigating the combined effect of individual and contextual predictors like proficiency in a language, early age of acquisition, and the availability of educational support, this study aims to contribute to finding better support strategies in higher education.

## **ADHD in College Students**

### **Overview of ADHD Symptoms: Inattention, Impulsivity, Executive Dysfunction**

ADHD is primarily characterized by three core symptoms: inattention, impulsivity, and executive dysfunction. Inattention involves difficulty focusing, being easily distracted, and frequently making careless mistakes. Impulsivity presents as acting or speaking without thinking, interrupting others, or struggling to wait in line or take turns. Executive dysfunction refers to challenges in planning, organizing and prioritizing an activity that is key to meeting the standards of academic excellence. These symptoms often persist into adulthood and can become more disruptive in college, where the pace is faster and students are expected to be more independent (Perez, 2025). While medications and behavioral strategies may help reduce symptoms, many students continue to face significant challenges in unstructured environments like university settings, where built-in support systems from earlier education are no longer present.

In the college setting, the combined effects of this disorder symptoms can negatively impact both academic and social performance. Inattention may cause students to miss key instructions, lose focus during lectures, or misunderstand assignments. Impulsivity can result in rash decisions, such as dropping a course too soon or rushing through assessments. Executive dysfunction makes it difficult to plan long-term projects, keep track of multiple deadlines, or stay motivated over time (Watson & Westby, 2025). These difficulties are further intensified by the lack of structure and external accountability that was often present in primary or secondary education. Without appropriate accommodations, students with ADHD may fall behind, not because of a lack of ability, but due to challenges in managing their cognitive processes in a demanding academic environment. Proactive support and understanding from educators and institutions are essential for helping these students succeed.

### **Time Management**

ADHD college students also experience a problem with time management since they possess defective self-regulation and time planning abilities. Such students tend to underestimate the time needed to perform tasks, take on more tasks than they can handle, or do nothing until the deadline is imposed upon them (Perez, 2025). College life is not a secondary education where the student is assigned routines; compared to college life, where the student is expected to attend to other issues in life, like school, studying, and work commitments. Other symptoms of ADHD often include underachieving students, non-meeting of deadlines, late completion of assignments, and last-minute panics without any outside-timed pressure or timetable organization. Such a disorganization pattern can result in an accumulating academic load, decreasing performance, and increasing stress. The way the body sleeps and eats, and the rest is also powered up, but time management has a poor effect. Online planners, time blocking, accountability partners, etc., may be helpful. Nevertheless, they might not log the same proportion of efficiency concerning the stage of executive functioning.

Besides their effects on academics, imbalanced time management among the ADHD students can also affect the college lives of the students, including their health and participation in social lives. One also misses meals, sleeps at odd times, and does not have daily actions such as exercising, owing to a lack of proper planning of the day. These interferences can, in

turn, worsen the ADHD, and it is in the form of a chain-reaction degeneration of the mind and body. Interpersonal strain could impact social relationships due to this refusal to stick to plans, show up late, or forget about an engagement (Watson & Westby, 2025). Moreover, due to the excessive number of tasks to fulfil the responsibilities, ADHD students develop reactions or feelings that they are overwhelmed and cannot accomplish all of the duties they have to care about. This phenomenon may lead to avoidance or action paralysis. This contributes to accumulating a backlog of work, which is why one can be placed on academic probation or even fail a course. Localized interventions to reduce these risks are possible through educational coaching, structured scheduling applications, and executing functioning workshops to facilitate the creation of prerequisite habits to thrive in self-directed learning.

### **Organization**

Organizational weaknesses in students with ADHD include problems organizing materials and academic content and planning long-term projects. The students easily lose the necessary items; they forget about the notes or the requirements of the classes, allowing opportunities to slip through and impede their educational performance. Unorganized thinking also hinders the writing of essays, the preparation of tests, and the structuring of reports. Organizational weaknesses are more evident in the college setting, where instructors give fewer reminders and require that a person take action themselves (Perez, 2025). The children can either not sequence the activities logically or underestimate the steps to complete more complex activities. It can lead to a lack of work finishing, repeated low-quality deliverables, and a loss of focus on important academic activities. Organizational problems are both logistical and cognitive, as they are caused by poor working memory and shifting tasks. Checklist interventions, color-coded folders, and structured templates can help, but only with regular reinforcement.

Beyond academics, poor time management can disrupt students' overall well-being and social engagement. Students may miss meals, maintain erratic sleep patterns, and neglect essential habits like physical activity due to unstructured schedules. These disruptions can worsen ADHD symptoms, triggering a cycle of declining mental and physical health. Social relationships may also suffer if students consistently miss appointments, arrive late, or forget commitments (Watson & Westby, 2025). The overwhelming nature of their obligations can lead to avoidance behaviors or paralysis in decision-making, causing further academic backlogs and potential consequences such as academic probation or course failure. Effective interventions like coaching, time management workshops, and structured digital tools can help develop the skills needed for success in self-directed learning environments.

### **Note-taking and Processing Lectures**

ADHD-affected students have difficulty taking notes and processing lectures in real-time because of attention loss, concentration, low processing speed, and working memory impairments (Mohebbi, 2023). They might not grasp central ideas, write off-topic information, or sort through information logically in a lecture setting with so much going on. A split concentration of listening and writing may cause them to trail behind in multimedia presentations or complex discussions. Students with this disorder cannot distill the lecture well and organize it sensibly, whereas their peers can, and they might have to repeat the recording or slides several times to understand it. The problems may result in knowledge gaps, later struggle to study, and lowered academic confidence. Audio recordings, structured note formats, or note exchange services with peers can be a partial solution, but these digital tools do not address the key processing issue.

The large lecture halls pose further note-taking burdens as they are highly distracting, and professors usually speak faster and do not take time to provide clarifications. ADHD students can be hyper-focused on one thing and consequently miss the following point material, or can be off task at times, thus their notes are fragmented and incomplete. By glancing through them weeks or months later, they can feel the notes are incoherent or lack the important context they need to study appropriately (Perez, 2025). This multitasking in listening, thinking, and writing rapidly becomes cognitively overloading, particularly when the teachers include new vocabulary or change topics abruptly. Besides, not all students with ADHD encounter no problems with auditory processing, which means that they find it particularly difficult to grasp the key aspects or keep up with the lively conversation. Although this burden can be accommodated, this assistance is not always offered by all institutions in advance, such as making a lecture transcript, a captioned lecture recording, and guided notes available, as well as providing criminal records. The practice of faculty training related to neurodiversity and universal design of learning could guarantee an inclusive and accessible manner of delivering lectures to students with cognitive differences.

### Memory and Attention in Studying

ADHD is highly limited to short-term and working memory, wherein college students will find it hard to memorize and use the new information in studying sessions (Rafailov, 2024). These students can waste much time reading something and not absorb information, or forget important facts not long after reading them. The environment, on its part, also contributes to this problem as it introduces distractions and creates poor, disjointed study habits. Concentration is also challenged in prolonged or tasking activities like reading textbooks or writing essays, leading to incomplete or poorly done tasks. Moreover, learners might have difficulty prioritizing the questions to train or be unable to learn the concepts between the topics. Such deficits decrease academic achievement and elevate the academic working effort. Chunking information, visual aids, and scheduled breaks can help, but they must be done using carefully structured guidance and practice.

Studying is one of the problems that students with ADHD have; they might not be able to start and maintain their attention during prolonged sessions. Most people stick to inefficient cramming techniques or last-minute learning because they have a problem with distributed practice and self-regulation. It is a method that hardly produces long-term success, hence the repeated battles during an assessment term. Also, such students can forget what has been learnt or do not know how to generalize knowledge from one environment to another, for example, transferring theoretical concepts to case studies or to test papers (Rafailov, 2024). Limitations in working memory interfere with higher-order skills like critical thinking, analysis, and the simultaneous handling of complex ideas. While group study may provide external structure and motivation, it may also introduce new distractions if not well managed. More effective strategies include active learning methods such as teaching peers, utilizing flashcards, or applying mnemonic devices. However, these tools must be explicitly taught and practiced over time to truly support long-term academic development in learners navigating ADHD-related challenges.

### Emotional Challenges: Anxiety, Low Self-Esteem, Burnout

Emotional problems of ADHD students are generally exacerbated by the level of academic and social life that college can involve. Chronic poor performance, negative impression, and peers' comparisons result in poor self-esteem and being a failure (Perez, 2025). Performance, deadline, or even social anxiety are some of the most common issues that most students may be facing, and the worst part is that it may escalate when it begins to interfere with performance in everyday life. It has been known to bring about burnout since these students must work really hard in order to meet their expectations within their limitations as far as their minds are concerned. Its basis of charge is unhealthy in terms of the emotional component. It typically culminates in isolation, loss of participation in the class, and being more prone to depression or substance abuse. Lack of emotional support may push students into the negative sequence of avoidance and performance worsening. One is the availability of counseling services and peer-mentoring programs, along with an inclusive classroom experience, as some of the methods to minimize this effect. Nevertheless, it is correct to deal with underlying academic and emotional needs through a proactive and individual approach.

As the emotional impacts of ADHD are underestimated, it plays a key role in whether the child will follow this or that route. The majority of those students who have ADHD in colleges enter colleges with inferior performance, rejections, or disciplinary actions that have lowered their self-esteem. This emotional baggage may be brought back once they encounter such issues in college, and it may become a source of not being enough and failing to achieve success (Raad & Ghafar, 2025). The stressful effect may be both academic stress and the fear of being judged due to the fear of failing to read social cues or having the problem of speaking up regarding asking for accommodations. Depressive symptoms may follow failure to perform well even after one has done their best, and thus, such issues may cause emotional exhaustion and burnout. Over time, the students will tend to develop an indifference towards school life, they will miss classes, or even escape. Counseling services such as cognitive-behavioral therapy, mindfulness-based stress reduction, and ADHD-specific coaching may prove helpful in developing resiliency and emotional wellness.

### Understanding Bilingualism

Bilingualism can be defined as the practice of using two or more languages by a person of diverse degrees of accomplishment. It is a multidimensional phenomenon strongly influenced by social, cultural, cognitive, and neurological factors (Watson & Westby, 2025). In college education, being bilingual can affect how students learn, communicate, and interact, especially for students with conditions like ADHD. To understand how bilingualism affects these students, it's important to know the different types of bilingualism, how it affects thinking, the cultural parts involved, and common misunderstandings. Bilingualism isn't the same for everyone; it depends on how well someone speaks each language, when

they learned them, and the social environment around them. This matters a lot in diverse universities because these factors can influence how much students get involved and how they see themselves.

### **Types of Bilingualism: Simultaneous vs. Sequential, Balanced vs. Dominant**

#### ***Simultaneous Bilingualism***

Simultaneous bilingualism is achieved when a person is exposed to two languages from birth or before the age of three. In these cases, both languages are regularly spoken at home without exception. Children raised in bilingual families often develop strong language skills in both languages equally. Early exposure to two languages promotes brain flexibility and can enhance executive functions such as attention control, task switching, and inhibition. This can be especially beneficial for students with ADHD, as bilingualism may strengthen brain areas involved in managing distractions and interference. According to Köder et al. (2022), people who have been educated in two languages since infancy can demonstrate better cognitive flexibility, which is typically affected in ADHD. The advantage, however, lies in long-term exposure and level growth development of both languages. When one language is not attended to, there are chances that students might not be able to express or comprehend in academic terms in formal learning institutions, and more so when the teaching language is less central.

#### ***Sequential Bilingualism***

Sequential bilingualism can also be defined as acquiring a second language when the first language is already established, rather than learning when one is young. This type of bilingualism usually happens when children migrate to a new nation or go to a new school where the language of study is not the one they speak at home. In contrast to simultaneous bilinguals, second language acquisition involves conscious efforts in sequential bilinguals, although there is often dominance in the first language. Sequential bilingualism can pose problems to college students with this disorder regarding fluency, ability to recall vocabulary items, and switching between languages, with the main issue occurring when the second language is applied in the academic environment (Watson & Westby, 2025). Having to translate concepts in their minds, these students may also experience more cognitive load that would interfere with their comprehension and delay the completion of tasks. However, with proper support, sequential bilinguals can gain academic competence in both languages. Vocabulary reinforcement and scaffolded content instructions are among the most valuable teaching strategies.

#### ***Balanced Bilingualism***

Balanced bilingualism describes a person who has roughly equal proficiency in two languages across speaking, listening, reading, and writing. Balanced bilinguals can smoothly switch between languages and use them effectively in social, academic, and work settings. This level of proficiency usually develops when both languages are consistently used and supported at home, school, and in the community. For students with ADHD, balanced bilingualism can promote cognitive growth by enhancing metalinguistic awareness, working memory, and executive functions. According to Williams et al. (2023), balanced bilinguals exhibit superior attention control and switching skills, which can assist in compensating for ADHD-related disabilities. Also, they can easily use both languages, fostering improved understanding in different academic situations. Nevertheless, to stay well-balanced in proficiency, it is necessary to reinforce the process regularly. When one language is underutilized, it creates a risk of underdeveloping the language, thus achieving the advantage of bilingualism. The educational system affirms and assimilates both languages in education, assists with maintaining the equilibrium, and stimulates scholarly involvement.

#### ***Dominant Bilingualism***

Dominant bilingualism describes people who are stronger in one language because they have had limited exposure to, or education in, a second language. Typically, the dominant language is used for thinking, learning, and expressing complex ideas, while the weaker language is often reserved for casual or family conversations. This situation is common among immigrant students or those educated primarily in a single-language system. For students with ADHD, dominant bilingualism can create difficulties, especially when their classes are taught in their weaker language. Vera et al. (2025) remark that such students can have problems with their thought organization, comprehension of lectures, or even articulation of themselves. All these challenges are further aggravated by the loss of processing speed and working memory, which is associated with ADHD. Also, bilingual students may be socially isolated, and the academic environment does not appreciate their stronger language. Differentiated language instruction support and integration of this group into the mainstream instruction can ameliorate proficiency gaps and better academic performance outcomes.

### **Cognitive demands of bilingualism**

Integrative control of two or more languages is highly demanding in terms of switching languages, observation of the non-target language, and control of the working memory. The process of focusing the mind on switching between languages due to cues is known as language switching. This talent mobilizes the systems of the executive functions in the brain that regulate attention, rerouting, and inhibitory control. According to Mohebbi (2023), such language transitions strengthen mental flexibility and enhance self-monitoring skills, which are already impaired in students with ADHD, and may not be as easy to tap into or have such a consistent effect.

The pressure to avoid interference of the non-focal language when conversing or writing increases the burden on the weak students with inhibitory control problems. Koder et al. (2022) and Bialystok et al. (2024) reveal that bilingualism can strengthen executive functioning in the general population, but mainly due to the regular practice of inhibitory routines. Nonetheless, the language-switching may be cognitively demanding to ADHD students with poor attentional filtering, particularly in the high-stakes academic environments.

According to Raad and Ghafar (2025), bilingual pupils with ADHD show delayed receiver response in a dual language, as well as higher rates of distraction as opposed to neurotypical bilinguals. This indicates that bilingualism might not amplify executive control but instead may overburden students with ADHD because there is a cognitive overload that cannot be handled within the available cognitive capacity.

Another critical area is the working memory. The general trend identified by Williams et al. (2023) is that bilingual people have better working memory due to the consistent juggling of two language systems. However, ADHD students tend not to take advantage of these benefits because they have already weakened memory consolidation and attention baselines. According to Zheng et al. (2025), low proficiency in one language in bilingual students with this disorder increased the possibility of cognitive overload. It decreased both comprehension and performance of any given task.

Moreover, bilingual ADHD students are likely to demonstrate a scope of working memory characterized by the inability to follow the multi-stage instructions, organize written presentation, or remember the contents of a lecture presented in their less native language (Watson & Westby, 2025). The results underline the requirement of educative accommodations that can lower mental stress in the event of academics, for instance, long-lasting time or visual learning provisions.

### **Cultural dimension and linguistic identity**

Bilingualism is more than just a mental skill; it deeply involves culture and shapes a person's identity. Language connects people to their cultural roots, family background, and community values. In the case of bilingual learners and, more so, immigrants and minority learners, language acts as a bridge between the home and their studies. This dual identity can impart resilience, empathy, and a global outlook, which are valuable assets in college settings. Diaz-LePage et al. (2024) also emphasize that bilingual students tend to feel a close affinity to both linguistic groups, predisposing them to becoming a protective factor against learning stress and alienation.

Nevertheless, this disorder may add to the challenges of identity formation due to exacerbating social and emotional susceptibilities. As stated by Santa Cruz-Rivera (2025), bilingual students with ADHD are at higher risk of experiencing their sense of cultural displacement, especially when there is no linguistic compatibility with the institutional one. These learners can internalize stigmas, become unwilling to respond in a classroom environment, or even think they must turn off their cultural identity to excel in academia.

In addition, academic accommodations could be viewed as culturally wrong or embarrassing in certain societies. According to Perez (2025), the cultural perceptions of disability and mental wellbeing may determine whether students seek assistance services. In the case of ADHD among biliteracy students, this cultural disconnect can lead the student to unmet needs and prevent them from performing as well as they would otherwise due to high intellectual potential.

To deal with these problems, schools should actively promote inclusive approaches. Black (2023) outlines that it is necessary to have culturally responsive pedagogy that does not pressure students' linguistic identity. Ldopez et al. (2025) justify the application of bilingual student-guided communities and mentoring groups to help create community and lessen the stigma. These campaigns will enable the students to define who they are as they cope with the requirements of college life with this disorder.

### **Misconceptions About Bilingualism**

Regarding schools and medical care, there are numerous myths about bilingualism. The well-known belief is that bilingualism confuses children or delays the progress of language development, and it is even more so for children with developmental disorders like ADHD or those with language disorders. However, Brouillard and Byers-Heinlein (2023) and Watson and Westby (2025) have demonstrated that bilingualism does not influence cognitive and linguistic growth in any adverse way when such groups as those with ADHD are observed. In fact, well-managed bilingual experiences can improve skills like understanding language structure and social awareness, which help with academic success.

Another fallacy that is popular among the people is the misconception that children with learning or attentional deficits should be prevented from being bilingual. Clinicians had a historical tendency to advise parents that they should not expose their children to the language excessively, which led to an overload of all relations in the brain. Nevertheless, it was found that attentional control can also be increased and plasticity of the neural system can be formed in the case of mindful use of two languages (Mohebbi, 2023). Bilingualism can act as a mental exercise that improves executive functions over time, rather than causing confusion.

Some people also think bilingual students have weaker academic language skills than monolingual students. The magnitude of the conceptual knowledge of the bilinguals in their respective languages is not considered in such a belief. According to Climaco (n.d.), people should not compare the reduced vocabulary within each language to linguistic inferiority. Brouillard and Byers-Heinlein (2023) also suggest that, in some cases, ADHD bilinguals may even outperform monolinguals when it comes to overall vocabulary knowledge since the experience of many different languages is otherwise used in the calculation.

Teacher preparation and caregiver awareness training must call out these more recent scientific findings to fight these myths. Efthymiou et al. (2025) encourage the implementation of strengths-based pedagogies, as they focus on bilingual ADHD students with cognitive and cultural resources. The necessity of implementing multilingual learning approaches into inclusive classrooms to make a positive academic experience and identity validation is also brought to the forefront.

### **Cognitive Impacts of Bilingualism**

#### **Pros**

#### **Improved Executive Function**

Bilingual individuals regularly engage in mental activities such as choosing which language to use, suppressing the non-target language, and switching between languages. These frequent cognitive exercises strengthen the brain's executive functions, particularly those involved in inhibition, cognitive control, and attention regulation. Bilingualism can be used as a less-than-intended cognitive training intervention on students whose minds are wired differently because of having ADHD, which impairs them in those two aspects. Researchers, such as Köder et al. (2022) and Williams et al. (2023), demonstrated that bilinguals excel in switching tasks and inhibitory control. These functions are key to academic success, particularly when dealing with lectures, assignments, and multitasking during classes. Bilingual ADHD students can be considered to have enhanced executive systems that would enable them to keep distractions off course and focus more diligently on academic work.

The improved executive function will facilitate planning, organization, and implementation in the learning environment, which tends to be lacking in students with this disorder. These mental advantages are functional in classroom activities, exam preparation, and self-education. Take the example of long lectures; enhanced inhibition helps to withstand distractions, whereas enhanced task switch helps a user switch between different courses or subjects. Furthermore, monitoring two languages will promote metacognitive awareness; students will be more aware of ways of thinking and learning (Watson & Westby, 2025). Since executive dysfunction is a trademark of ADHD, bilingual students might portray more developed abilities of controlling their cognition, hence can provide a defensive mechanism in the pressurizing academic setting. These improvements cannot be considered universal and occur much more frequently in bilinguals with long experiences of high-quality exposure to their language and balanced proficiency in both.

#### **Better Cognitive Flexibility**

Cognitive flexibility is the ability to switch back and forth between activities, perspectives, or thoughts. Bilinguals develop this ability by following different language patterns, rules, and cultural presuppositions. The practice will aid them in easily

accommodating adjustments to novel situations, switching between cognitive states, and prioritizing between conflicting demands, all of which are directly useful to students under fluid teaching practices. Mohebbi (2023) and Diaz-LePage et al. (2024) explain that bilingual speakers excel at flexibility-based tasks where the activities prompt people to alternate categories promptly or reason when information is unclear. In children with this disorder, the thought inflexibility they are prone to exhibit in academic settings will be mitigated through increased cognitive flexibility, facilitating their adaptability to various situations.

Cognitive flexibility is practically the ability of the affected students with ADHD to manage switching and changing tasks and switching of the schedule, complex instructions, and multi-stage tasks. In other words, bilingual students are flexible in their emotions and thoughts on a situation that involves an unexpected halt, a change in deadlines, or teamwork (Watson & Westby, 2025). This adaptability reduces the chances of getting frustrated or dropping off doing something, as this is common among people with low frustration tolerance. Better flexibility helps to be more relaxed with perspective taking in conversations and working with peers, and creates a sense of belonging and confidence in studies. Although this disorder was associated with poor results in switching focus or developing strategies, bilingual students can enjoy considerable advantages in that sphere, allowing them to obtain improved outcomes in their studies and their relations with others within the university environment.

### **Enhanced Working Memory**

Working memory is the system that holds and processes information temporarily to perform higher cognitive tasks, such as learning, reasoning, and comprehension. The process of bilingualism frequently works with this system with the help of retrieving words and sentences, as well as the process of code-switching. According to the research by Williams et al. (2023), bilinguals more often than monolinguals possess stronger working memory than the latter. This is particularly true when the language is used regularly and the prevalence of use is balanced. College students with this disorder, who traditionally have trouble with memory-intensive tasks, can acquire much help in academic tasks, like taking notes, exam preparation, and solving problems, through these additions. Bilingualism can be said to essentially allow life training in the mental workspace, where the new knowledge is processed.

Working memory enables ADHD students to remember more, play with knowledge taught in the lecture, follow multi-step instructions in problem-solving, and write and structure their thoughts better in real-life learning situations. It is essential when working on things that cannot be thought over in the mind, such as when structuring an essay or analyzing lab results (Diaz-LePage et al., 2024). For example, students need a fully functioning working memory when it comes to history or law, where they have to track narratives and legal arguments. Increased memory capacity could also help during a test-taking situation, including memory recall of particular terms or ideas. Although these benefits are not felt by all bilinguals equally, particularly by those who are lowly proficient or use it sparingly, synapse strengthening potential brought about by language juggling is tremendous to bilinguals with ADHD.

### **Increased Metalinguistic Awareness**

The power of reflection and analysis of language as a system is called metalinguistic awareness. A bilingual person takes control of two language systems, increasing their exposure to grammar, syntax, and vocabulary. This understanding assists them in recognizing structural formations and adopting language applications dependent on the situation, good literacy, and understanding. ADHD students usually experience problems with such areas under the influence of impulsiveness and attention deficit weaknesses. Nevertheless, bilinguals can acquire compensating skills that will help them with proofreading abilities, syntactic formation of sentences, and interpretation of figurative or idiomatic language. Brouillard and Byers-Heinlein (2023) mentioned that bilinguals tend to demonstrate increased awareness of language functions, which may positively impact performance in academic fields that are reading and writing-intensive.

This sensitivity to language helps the ADHD students to navigate academic writing more accurately and decode unknown words or grammatical rules more easily. As could be noted, bilinguals can be better at detecting writing mistakes or valuable interconnections in readings (Konstantina & Evdokia, n.d). These skills are particularly useful in fields like philosophy, literature, and psychology, where expressing ideas clearly is essential. Additionally, metalinguistic awareness supports learning additional languages, which benefits bilingual students in today's global academic environment. Improved communication skills also boost confidence in listening and speaking, enhancing overall academic success.

## Cons

### Language Interference and Switching Fatigue

Language interference happens when rules or words from one language mix up or disrupt the use of the other language. This is more common when bilingual students have unequal skill levels in their two languages, which can be made worse by ADHD-related cognitive difficulties. In support of this, Raad and Ghafar (2025) argue that ADHD students are less academically fluent and talk of only one specific interfered thought process while carrying out a given situation captured by an extent of language use. This kind of confusion can slow understanding what one is reading, lower the lucidity of written text, and lead to speech disabilities during classroom or presentation speech. In case of the ADHD students, the verbal organization, which is already a problem with the students, is compounded by interference.

Switching back and forth between two languages can also cause mental tiredness, known as switching fatigue. Koder et al. (2022) explain that such cognitive fatigue reduces attentional control and in turn, may arouse such symptoms of ADHD as distractibility and impulsivity. When language switching becomes too frequent, students may respond more slowly, make more mistakes, and their grades can drop. In a college setting, where students must use both languages often and switch between them quickly, this fatigue can build up fast. The result may be feeling overwhelmed, losing motivation to attend classes or participate, and increased anxiety or low self-confidence in learning.

### Slower Language Retrieval (in Some Cases)

Students with this disorder tend to have problems with word retrieval, even in the language that they excel at, because of poor working memory and slow processing. Bilingualism may make this worse by increasing the set of lexical items and rivalry between the languages. Williams et al. (2023) uncovered that bilingual students with ADHD may pause more often, utilize ambiguous terminology, or replace the wrong words under pressure. This can cause misunderstandings during presentations or timed writing tasks, which may lead to lower grades or dropping out. These problems are not due to lack of understanding but the challenge of quickly retrieving words.

Social implications of the delays in retrieval may also be severe. ADHD students can also develop self-consciousness; they will not talk much or at all, and these students develop a specialty in avoiding certain academic activities (Vera et al., 2025). This limits classroom participation and lower students' confidence in their academic abilities. Educators who are not conversant with bilingual language process trends may underestimate these challenges. To help, students could be given more time for tasks, allowed to respond orally in their strongest language, or work with peers to minimize the impact of word-finding difficulties.

### Higher Cognitive Load in Low-Proficiency Students

ADHD students already start their work with decreased cognitive resources since these students lack attention, working memory, and processing speed. When this is overlaid through bilingualism, especially where one of the languages is poorly mastered by the students, the effect is cognitive overload. Zheng et al. (2025) identified that bilingual ADHD students in high-proficiency settings have a higher chance of being involved in stress, abandonment of tasks, and emotional dysregulation during academic activities. They can waste much energy on decoding instructions, translations in their minds, or the need to deal with the confusion of similar words, and have little time to think in a higher order or be creative.

The result of this cognitive overload may be cascading. Take the case where a bilingual student with this disorder must interpret an essay question, change language to translate the important terms, draft a response, and then write it in a given time frame, and he or she could merely give up under the strain. Such students are also more likely to drop out of work with a group or separate assignments if they feel that being separated by the language barrier makes them special (Watson & Westby, 2025). To solve this, educators should use scaffolding: tasks should be divided into parts, students should be provided with different types of visuals, and academic vocabulary should be promoted so as not to overburden them with information. Viewing cognitive load as an impediment and not an issue related to motivation is the key to guaranteeing fair access to learning among bilingual students with this disorder.

### Advantages of Bilingualism for ADHD College Students

#### Enhanced Task-Switching Abilities Supporting Executive Function Challenges

Bilingualism involves switching between languages depending on the social setting, the person being spoken to, or the topic. This back-and-forth switching requires strong mental control, especially the ability to suppress one language while using the other. For college students with ADHD, who often struggle with controlling impulses and adapting their thinking,

bilingualism may act like natural training for their executive functions. Switching languages is similar to switching tasks in academic work, such as moving from one assignment to another, changing classes, or adjusting strategies during a task. The research indicates that bilinguals exhibit increased activity in the brain areas that deal with conflict monitoring and cognitive control (Köder et al., 2022). This is particularly important for ADHD students, who typically have less developed brain regions that regulate behavior and organization. The frequent task-switching in bilingual brains may help these students manage academic multitasking better than students who speak only one language.

In real-life academic contexts, switching of tasks is necessary, such as a student changing between taking notes of a lecture and being able to comprehend the lecture materials, going from theory to practice in laboratories, or incorporating comments into resubmitted essays (Watson et al., 2025). These transitions are usually overwhelming to ADHD students, and they either miss steps or become mentally tired. However, bilingual students who are used to switching between languages may find it easier to shift their focus without losing productivity. For example, a student fluent in both Spanish and English might quickly move between listening to a history lecture in Spanish and writing an essay in English because they have practiced thinking in two languages. This skill of mental flexibility can help them adapt better to different academic tasks, reduce frustration, and improve performance. Still, the learning environment needs to be well-structured to avoid overwhelming students with too much switching or poorly organized tasks.

### **Exposure to Multiple Language Systems Boosts Mental Flexibility**

Mental flexibility is one of the traits of people with ADHD that is usually underdeveloped and is exhibited in the area of being able to change views, approaches, and strategies as per changes in the demanded behaviors. The concept of bilingualism also enhances mental flexibility by engaging regularly in multiple linguistic, cultural, and communication-related norms daily. In the case of ADHD students who tend to think in fixed ways or stick to a single solution on how to accomplish a task, such exposure makes their thinking systems comfortable with believing other solutions and switch gears when the academic task demands. As an example, one can only imagine how every time a bilingual student has to use the knowledge that there is the notion of a false friend or the words which are used differently depending on the context in the two languages, he or she should interpret the meaning by taking into account intent, tone and linguistic structure (Mohebbi, 2023). This skill helps develop creativity and better problem-solving and thinking abilities. Research shows that bilinguals perform well in tasks requiring flexibility, such as quickly sorting or reorganizing information, and these benefits go beyond language alone.

Extending a flexible thinking mode to classroom-based learning requires that the student with ADHD be instructed and enabled to manage the unpredictability of the classroom environment, for example, changed deadlines or new instructional techniques, changes in group dynamics. A bilingual student can more actively reinterpret issues, switch pieces of mind in writings, or change studying tactics even during the semester. The latter type of mental agility is not only priceless in university practice where autodidacticism is the rule, but also produces an effect of deep engagement instead of stiffness (Rafailov, 2024). In other words, a student with ADHD who speaks two languages will clarify a scientific explanation by translating it into the latter language mentally and thus understand it. This theoretical capability of reinterpreting gives an academic back-stop and may ease the stress frequently occurring as ADHD students encounter cognitive classrooms. The strengthened, inculcated mental flexibility might heighten academic flexibility and increase emotional control by lessening frustrations as some plans or schemes alter unpredictably.

### **Cultural Awareness Supporting Confidence and Social Engagement**

Bilingual learners usually find themselves surrounded by at least two cultural models, which provide them with a wider range of views, more understanding, and greater sensitivity towards other people. To ADHD students, who are often socially disadvantaged, whether due to their impulsivity, lack of emotional control, or inability to interpret their social environment, this multicultural outlook may be used to enhance their peer relationships and make them less isolated. The process of operating in varied social spaces can help bilingual students with ADHD to better learn context, tones, and the expectations of various cultures, which leads to better communication. Diaz-LePage et al. (2024) go so far as to say that such an increased cultural literacy can even be employed to empower identity and a sense of belonging, especially to newly enrolling immigrant or minority students in widely monolingual learning institutions. Cultural identity is linked to the positive qualities of resilience, academic engagement, and emotional wellbeing, which are especially important for students who have to cope with the dual disadvantages of ADHD and linguistic diversity.

Additionally, cultural awareness may directly contribute to the academic confidence by recognizing the student's background and linguistic identity. The ADHD students may instead internalize failure, and they may develop low self-esteem and avoid activities. A positive conceptualization of bilingualism can promote positioning the student with a representation of deficit-based to a strength-based self-concept. This can be achieved by joining language clubs, cultural events, or bilingual mentorship programs, where these students can feel their presence and appreciate it (Watson et al.,2025). These are some good social reinforcements, and they help the students gain confidence and motivation to participate more actively in the discussions in the classroom, the group work, and life on campus. More importantly, code-switching helps to solve social problems of two different cultures, and can be the means of honing individuals' social problem-solving skills, for example, when to switch to another code, how to ask specific questions without sounding insensitive, and therewith, make ADHD students more thoughtful and less impulsive in relations with their peers and professors alike. Finally, such cultural smartness can decrease stigma and promote self-advocacy; a good educational experience promotes a more inclusive one.

### **Learning Two Languages Supporting Resilience and Metacognition**

Mastering two languages, particularly in various academic and social settings, involves resilience, setting goals, reflecting, and thinking, which are usually problems for ADHD students. The endurance required to sustain and foster bilingualism creates a form of mental and even emotional strength. Bilingualism can establish a notion of developed perseverance in ADHD students who are usually befuddled by disappointment or loss of any objective when action becomes more than they can handle. Whenever a student can switch languages, translate ideas, or work with linguistic uncertainty, he or she applies grit and problem-solving. According to Vera et al. (2025), many bilingual students may claim to have increased confidence in their ability to navigate systems in institutions due to the existing experiences that help them to persist when faced with setbacks due to the complexity of languages.

Besides resilience, bilingualism will enhance metacognition-awareness about how one learns. Speaking two languages and balancing them is the most challenging part, as it needs self-monitoring regularly: weighing your wording, correcting grammar, reworking tone, and sensing how well the listener comprehends. These reflective habits can help ADHD students overcome impulsive decision-making and inattentiveness (Vera et al.,2025). To illustrate, a bilingual student with ADHD can get used to pausing and reviewing their answer before handing in an essay or answering a question during a lesson. Practiced within the language learning process, this delay can be turned into academic success and higher emotional control. Eventually, these students will be better strategic learners using planners, self-checklists, or a reflection log to keep progressing. ADHD usually suppresses the chances of developing learning strategies internally, and bilingualism unintentionally promotes the adoption of such mentalities, resulting in less dependent learners who are more assured and confident in pursuing their studies.

### **Disadvantages and Challenges of Bilingualism for ADHD Students**

#### **Increased Cognitive Load Can Worsen Focus Problems**

Cases with ADHD and bilingual students can magnify their cognitive loads as they have to maintain two language systems during learning activities. With every information processing procedure, the student goes through, including reading a textbook, writing an essay, or participating in a discussion, he or she might be obliged to translate or choose between two pools of words, rules of grammar, and cultural situations (Mohebbi, 2023). This simultaneous processing adds to their cognitive load, the total mental effort used to complete a task. Since ADHD students already struggle with attention control and have weaker working memory and executive functions, their limited focus can easily become overwhelmed by the extra demands of bilingualism. As a result, they might finish less work, feel tired, or lose interest more quickly.

This cognitively high demand can take many forms in the classroom. Bilingual ADHD students can seem to lose focus faster than their colleagues, miss important information in homework, or become frustrated in lectures because they need to translate ideas to themselves mentally (Rafailov, 2024). Constantly switching between two languages can damage retention and understanding even when the material is presented in the stronger language. This mental juggling can create a feeling of clutter or mental slowdown, lowering motivation and confidence in their studies. It can be especially challenging in language-heavy subjects like literature, law, or social sciences. The difficulty doesn't come from a lack of ability but from the ongoing strain of managing multiple, sometimes conflicting, thoughts at once.

### **Difficulty in Organizing Thoughts Across Languages**

ADHD students tend to have trouble organizing their thoughts into coherent ones, giving them trouble generating sequential thought structures in places where they are supposed to be paragons of clarity, logic, and argument development. This is an already challenging task, and when using two language systems to convey such ideas, the bilingual student finds it less easy (Watson et al.,2025). They can begin to develop an idea in one language. Then they may turn to another to attempt to complete it, resulting in poor writing style, unfinished explanations, or stumbling during a presentation. The working memory weaknesses that are typical of ADHD also worsen this phenomenon by hindering the capacity of a student to hold and maneuver information between languages. There are delays in the translation process caused by the fact that the translation is taking place within the brain; it throws logical progression out of order, and the possibility of introducing tangents or repeated wordings grows. Teachers with little knowledge about bilingual processing may read this as an inability to organize or not being very keen, as opposed to a neurological basis influenced by how languages are interacted with.

Such conflicts in organizations are more acute when the two languages can differ in their grammar, syntax, or discourse rules (Vera et al.,2025). As an example, when there is a bilingual ADHD learner whose first language is structured inductively, and the second language consists of deductive reasoning, the movement of thoughts is cognitively stressful. Research is not just simple when students have a sense of what they are saying could be pretty intimidating to write in a clear language with borrowed tones of academia. Writing activities in writing this can lead to a lack of complete development of the thesis, poor transitions, or lack of clarity on the conclusion. In oral responses, students might take a long time to respond or forget what they are saying, or even find it challenging to respond in the first place. Such difficulties tend to be internalized as personal weaknesses, solidifying shame or academic disengagement that are associated with ADHD. All these challenges could be reduced by systematic use of graphic organizers, sentence frames, and language modeling, though without their support, bilingual ADHD students have a disadvantage in showing what knowledge they have.

### **Language Switching Might Confuse Working Memory in ADHD**

Cognitive features for bilinguals, one of the defining characteristics is the capability to alternate between languages; such ability is dependent on the social or learning situation. The skill occurs when one language is activated without inhibition of the other language, and this process needs an efficient working memory and executive function (Santa Cruz-Rivera, 2025). In neurotypicals, the habit of switching can help to improve such abilities with time. However, the working memory of students with ADHD is usually weak, and as a result, this toggling inside the head is more ineffective and confusing. These students can be confused when they have to do some complex academic work, changing languages as they might not be able to remember instructions, keep multiple words in mind, or recall the next step in a multistage task. Every language switch interrupts the already weak temporary mental workspace, which people with ADHD already have. This may lead to loss of thought, wrong use of grammar, or loss of reading sense.

This confusion can show itself in tests, essay writing, or team projects requiring different languages in academic and real-life situations. For example, a bilingual student with ADHD can interpret a lecture in his or her way and retain or assimilate the information, but shows difficulty conveying the understanding through a different language when the assignment instructions and questions include a different wording than during the teaching of the concept (Raad & Ghafar, 2025). By going back and forth between the receptive and expressive language tasks, the limited working memory can forget important material, and they will restart the tasks repeatedly. This not only impacts academic accuracy but also frustrates the management of time since it slows down the work done, and in addition, it is time-consuming. Such confusion can also be worsened by exposure to inconsistent language use, common in multilingual homes or where there are immigrants. A bilingual student with ADHD might perform poorly even when they have an understanding of the concepts due to a lack of accommodations, being assessed in the same language all the time, with visual scaffolds, and extra processing time.

### **If Language Proficiency Is Weak, This Can Slow Academic Processing**

Not all bilingual students can speak both languages equally well. When a student is taught in their weaker language, the level of cognitive effort to decode a word, interpret a complex sentence construction, and, as far as abstract information, the level of effort to sort and make sense of the information and process goes up astronomically. The already impaired processing speed of the ADHD students becomes doubly burdened; the students should also cross linguistic and attentional levels to be able to keep up with instruction. Processing at a slower speed can also lead to skimmed notes after the lecture,

confusion in the process of readings, or inability to respond in time during discussions. As noted by Zheng et al. (2025), such delays may have a detrimental impact on understanding and confidence and result in patterns of avoidance and disengagement. Even highly motivated students can start developing a notion that academic achievement is an impossible goal when they have slower processing speeds and show persistent underachievement.

Also, this delay in language processing may be compounded after several courses and assignments. To illustrate, assume that a bilingual ADHD student reads two times slower than the course materials, having weaker language skills than the more proficient language. This student will have no time or energy to study, write, or interact with peers. Such an imbalance in time can result in sleep deprivation, deadline miss, or burnout, a state that will intensify symptoms of this disorder (Black, 2023). These students in a busy classroom may not even bother to seek clarification out of fear of being perceived as sluggish or poor performers in the classroom, thereby isolating the learner further. Unlike regular language learners, a bilingual ADHD student needs customized interventions that consider the linguistic development of such students along with their cognitive profiles. Processing constraints can be relieved through measures like glossaries and translated cues or multi-language teaching, but in the absence of these, limited language fluency can have dramatically adverse effects on academic performance and well-being.

### **Cultural and Linguistic Mismatches with Academic Language**

Academic language is formal, abstract, and discipline-specific, particularly in higher education. It can significantly contrast the post-home language with the broken language of communication that a real bilingual student, with ADHD, has to drag. This alienation may cause the academic material to become foreign or unrelated, leading to a rise in the distance between the learning and the mind and heart. Students can probably comprehend the ideas, but cannot use the definite terminology or stylistic rules when discussing the academic sphere. ADHD further complicates the issue by making it hard to pay attention to detail, dampen editing oneself, and cut down working memory capacities. Thus, learners are likely unable to articulate advanced thought due to an inability to express themselves or missing grading requirements, even though they know the topic. This kind of disconnect, according to Vera et al. (2025), can demoralize and make the students believe that they are incapable of performing, further solidifying the self-doubt around this disorder.

These differences also affect behavior and participation norms in the classroom due to cultural differences. There are cultures where it is not appreciated to interrupt and question authority, and the norms of the academic system in the West encourage debate and assertiveness. Bilingual ADHD students can have difficulty negotiating these expectations, particularly when, after failing to adhere, they overcorrect or put themselves on the wrong side of the inappropriateness (Huff, 2024). Moreover, the problematic place of home languages or cultural knowledge may also be discouraged by unintentionally fostering an alienation in promoting students who utilize Standard English or monolingual norms in a school environment. The lack of culturally responsive pedagogy can make such students feel coerced to assimilate, losing their interest in studying and sense. To assist such learners, respecting linguistic backgrounds, coalescence of culturally relevant materials, and overtly instructing academic conventions with a respectful and accommodating approach with diverse learners must be considered in helping such students.

### **Discuss how this can affect reading comprehension, test-taking, and lecture understanding.**

Students in colleges with Attention-Deficit/Hyperactivity Disorder (ADHD) may be bilingual, and the interaction between the two will make learning difficult because they have an impairment and complex language. Such challenges include high mental load, poor language skills, failure to have an organized way of thinking, and working memory obstructions that interfere with the basic elements of academic endeavor, specifically reading comprehension, taking exams, and practical lectures (Perez, 2025). The executive processes of this disorder then exacerbate these effects and cause the students to have a more difficult time controlling themselves, planning, and adapting to challenging learning settings.

### **Reading Comprehension**

Reading comprehension is the process of decoding, retaining information, making inferences, and incorporating it with previous knowledge. However, in the case of bilingual ADHD students, this process becomes more complex due to the cognitive overload and a slower processing rate, mainly when reading is carried out in the less dominant language (Mohebbi, 2023). When a child is reading, extra memory is required to go back to the reading mind to decode the words or concepts, which, in ADHD, are low in the first place. Therefore, students will tend to read previous points too fast, distort the meaning of words, or even forget the plot lines. Interference effect: Language may also cause learning to lag if the grammar or the

syntax of one language interferes with the comprehension of another. Such interrupts lower the reading speed and the ability to grasp the true meaning of the material, particularly in abstract academic reading, which includes using domain-specific words or metaphors.

Furthermore, the distractibility characteristic of this disorder may distract the students and leave them with no other option but to read the same paragraph several times (Ducoli, 2023). Not only does this raise frustrations, but it also increases the duration that will be taken to accomplish assignments, resulting in burnout. Devoid of special linguistic preparation, such as pre-teaching of vocabulary, provision of simplified texts, and use of illustrations to accompany reading, bilingual ADHD learners can easily become left behind in their studies, despite holding the requisite conceptual knowledge, because such knowledge becomes presented to them in spoken words.

### **Test-Taking**

Bilingual ADHD students have to live in a highly stressful testing environment. Time-based assessments demand fast reading, understanding, planning, and remembering everything within a short amount of time. Writing tests in the weaker language of a student can lead to a sharp rise in cognitive load (Diaz-LePage et al., 2024). Students must decode the prompt, translate vocabulary keywords, access the answer, and develop the response, all of which are affected by ADHD symptoms, including impulsivity or anxiety. Switching language can also mix working memory during high pressure, resulting in misinterpretation of questions or even answers.

Moreover, bilinguals commonly experience word retrieval problems, particularly in stressful situations across all languages and even more so in this disorder, since the processing rate slows down and the verbal fluency is limited. This can lead to approximations or unspecific answers, poor test results, and stress. Students can also fail to interpret instructions correctly or proceed with assignments impulsively, working without adequate comprehension of instructions (Mohebbi, 2023). In particular, multiple-choice questions may be a problem with some minor language hints, as students with this disorder respond poorly to careful reading. Because of rigid testing conditions, these students can fail to perform well, not because they have limited knowledge, but due to cognitive and linguistic mechanisms that cannot keep up with the needs of the test.

### **Lecture Understanding**

Lectures involve long-term focused attention, listening, and even note-taking during the lectures, which is time-sensitive and involves assimilating new information. In this regard, bilingual ADHD students have some difficulties. Presenting the lecture in a language that is not dominant to them can make them too slow to process the information fast enough to be able to keep up (Climaco, n.d). With the concepts being complex or fast-moving, the student will likely lose some important points or become mentally lazy through mental exhaustion. Internal translation needs can disrupt the flow of understanding, combined with the symptoms of ADHD, such as distractibility. Students cannot get the whole picture and understand big themes or connections.

Another barrier is note-taking. When the student with ADHD learns a second language, he or she might be trying to write using one language whilst listening using the other, leading to inconsistencies in terms and structural ambiguity in his or her notes (Zheng et al., 2025). These broken notes can usually be complex to learn after the fact. Without the use of visual aids or written outlines, the student's ability to remember the lecture's content is further reduced. Peer support, audio recordings, and bilingual glossaries may help, yet with no active accommodations, the lecture environment transforms into continual cognitive overload.

### **Influencing Factors**

#### **Language Proficiency: Balanced vs. Dominant Bilingualism**

The level of language competency is among the most significant variables that affect how bilingualism interacts with ADHD. The cognitive benefits of bilingualism are many and well known, as balanced bilinguals take advantage of better executive functioning, better understanding of metalinguistic abilities, and more substantial educational achievement (Ducoli, 2023). In the case of students with ADHD, who otherwise have issues with focus, working memory, and organization, balanced proficiency can facilitate cognitive development and give them dual-language practice in attentional control and linguistic versatility. The same sort of mental discipline that it takes to remain fluent in two languages should promote daily practice of disciplined activities such as reading, writing, and vocabulary exercises. They provide a intuit compensatory advantage as they stimulate cognitive competencies that would be underdeveloped in ADHD students. In

addition, balanced bilinguals switch between academic and social language registers much better, enabling them to integrate into learning institutions more confidently.

On the contrary, prevalent bilingualism- when one language in bilingualism is powerful compared to the other- may also impede academic and intellectual achievements, particularly when the weaker language is used to teach. Pupils of this disorder type can have problems with understanding, written expression, and verbal fluency in the non-dominant language, which magnifies attention and processing problems. Such linguistic imbalance adds the extra burden of mentally translating or interpreting the academic work, taking away space in the working memory to engage in higher-order thinking (Huff, 2024). The bilinguals who have this disorder are also likely to struggle with language retrieval, and what results is hesitations in speech or lower-class participation in language retrieval. These technical language issues may lead to frustration, anxiety, or a perception of incompetence, which has a detrimental effect on academic self-esteem. The combination and the extent of language proficiency are thus one of the defining factors determining whether being bilingual is beneficial or a burden to the ADHD students.

### **Age of Acquisition: Early vs. Late Bilinguals**

The onset age of a second language significantly determines the cognitive and academic performances of bilingual ADHD people with ADHD. Individuals who learn two or more languages at a young age, before age six, have better integrated structures of neural networks that manage more than one language system. This initial contact facilitates the enhancement of cognitive abilities such as attentional control, working memory, and language processing, all of which are impaired in ADHD (Black, 2023). In a situation where children learn two languages at a time, they compensate by having more activation of the prefrontal and the parts of the brain called parietal, which contribute to the areas of executive functioning. In children who have this disorder, early bilingualism can be considered a training ground since it is less formal to develop cognitive skills in a child that are essential for academic achievements. Also, early bilinguals are more inherently fluent and culturally integrated, decreasing the mental load of using multiple languages.

In contrast, late bilingual children who learn a second language beyond childhood age can have more difficulties, especially when the symptoms of ADHD are firmly entrenched prior to the acquisition of the language. In most cases, learning and applying a new language may be too much, as students struggle with attention span, persistence, and memory retention (Raad & Ghafar, 2025). Late bilingualism may be conscious, repeat-based, and entail self-control, which is not usually within the range of abilities of ADHD students. Such students also face frustration in the learning process, which may prompt them to engage in avoidance tendencies or disengage in classrooms. What is more, late bilinguals might never attain automaticity with their second language, which early bilinguals might enjoy, and thus, they may find academic tasks more ponderous. Late bilingualism is likely to act more as a disadvantage than a support to the students with ADHD without good scaffolding and specific language training.

### **Context of Language Use: Home vs. Academic**

Bilingual students use each language in different situations that greatly influence their academic functioning and psychological development. When the student hears and speaks one language at home and is educated in another language, primarily in schools, there can be a detachment between the social and academic life. This divide may prove to be problematic, especially when it comes to ADHD students whose executive functions and organizational structures are already weak (Rafailov, 2024). They can also have difficulty transferring home language linguistic skills acquired in a home setting to academic ones, in cases where the home language does not have technical or discipline vocabulary. This leads to higher processing requirements and an inability to read, write, and respond verbally in the course of instructions with lower fluency. Also, the students might believe that they can be punished or pressured by keeping their language at home, which creates confusion of identity and a lack of confidence in their intelligence to succeed in the academic environment.

Conversely, in cases where the students are presented with situations to apply both languages at home and in school, there is a high probability that the advantages of bilingualism will be realized. The students will become fluid and confident in any domain with the support of the academic language using home discussions, bilingual tutoring, or culturally responsive instruction (Perez, 2025). This continuity minimizes cognitive dissonance and assists ADHD learners in keeping their concentration and thoughts more structured and remembering vocabulary more effectively. Besides, the regular practice of formal and informal training trains executive functioning by providing regular language-switching and language-gagging activities. Providing support to bilingual ADHD students by schools that recognize and accommodate national language

styles within the school curriculum, such as bilingual learning, translation, or culturally appropriate books, allows the bilingual students to excel socially and educationally within an inclusive environment.

### **Severity of ADHD Symptoms**

The ADHD cases, according to the severity of the symptoms, span from mild inattentiveness to severe impulsivity and emotional dysregulation, which primarily affects the experience of a student regarding bilingualism. Children with less severe ADHD symptoms might find that the task of bilingualism is cognitively more manageable, and they can take advantage of the cognitive benefits of bilingualism in terms of better task switching and language flexibility (Black, 2023). Such students possess enough executive control to actively explore bilingual learning, follow up on their language usage, and utilize dual-language skills when working out their academic problems. Bilingualism in such situations can act as a protective measure as it seems to improve the development of mental systems and decrease the severity of ADHD-related impairments. Moreover, these students could also possess metacognitive sensitivity to create strategies for managing the attention process, language interference, and prioritizing tasks.

The ability to become bilingual, however, may present major drawbacks to students whose ADHD symptoms are more severe. Such high levels of impulsivity, working memory problems, and emotional reactivity can disrupt the skills of learning and using dual languages (Diaz-LePage et al., 2024). The latter can fail in word retrieval, form incomplete sentences, or change topics abruptly when communicating with others, which leads to low grades and social frustration in these students. Inability to pay attention severely can also cut down language input in crucial developmental phases, thus reducing the possibility of high proficiency in either of the two languages. Cognitive advantages normally expected to accompany bilingualism are not likely to be achieved in such instances. Educators and clinicians need to precisely evaluate the reactivity of the severity of symptoms and bilingual demands to establish relevant assistance systems, such as speech-language support, executive functions training, and individual education planning.

### **Educational Support and Accommodations**

The educational support systems can make all the difference in whether promoting bilingualism would help advance progress in academic work among students with ADHD. When there are adequate and well-maintained learning conditions, bilingual standards, inclusive activities, and accommodations for ADHD issues, students will have better chances of recording the benefits of bilingualism. Such accommodations can include additional time on the tests, instructions adjusted to language, assistive technology, visual aids, and access to bilingual aides. Such aids save people's minds, and encourage students to operate within the goal requirements of an activity instead of sorting out language or attentiveness obstacles (López et al., 2025). By teaching bilingual students with ADHD that they are accomplished learners with different cognitive profiles rather than underachievers, educators will help them become successful academically and socially. The active educative measures lead to confidence, participation in the classroom, and a minimal probability of dropping out.

On the other hand, the absence of necessary education may critically impair bilingual ADHD students. The linguistic difficulty, coupled with impairments that ADHD generates, causes chronic academic underachievement without any accommodations (Mohebbi, 2023). Linguistic barriers might result in students missing out on instructions, not being able to finish tasks, or taking on the wrong idea. Moreover, the failure of schools to consider both requirements of bilingualism and ADHD can lead to inadequate forms of interventions used by the schools that could only attempt to render support in language proficiency, but not in ADHD or vice versa. This disjointed method restricts it and increases emotional issues that include fear, poor self-esteem, or defiant attitude. Educators must be trained to discriminate instruction, employ universal design in learning, and assess learners' language and cognitive development progress to achieve equality in learning outcomes.

### **Cultural and Socioeconomic Background**

The cross-relationship between bilingualism and ADHD in the scholarly arena largely depends on cultural or socioeconomic background. Children in multicultural, multilingual families can have good parental support and a positive view of being bilingual, promoting the notion of identity and the development of language. In this respect, bilingualism can be considered a strength, and family involvement in education is excellent. Such students can also receive heritage language courses, community resources, and education professionals who validate their dual-language identity (Black, 2023). Emotional resilience and academic motivation might be reinforced with the help of this cultural validation; both are essential factors

in coping with ADHD symptoms. Moreover, children growing up in a bilingual context where neurodiversity is normalized are more likely to seek help earlier. Whether they resort to coping mechanisms, it is done more adequately and efficiently.

On the other hand, disadvantaged or linguistically excluded populations can be exposed to a variety of challenges interfering with language usage and, at the same time, the process of ADHD management. The inability to receive diagnostic support, mental health treatment, or language assistance opportunities may slow down the intervention and worsen the symptoms (Ducoli, 2023). In such homes, where parents do not speak the same language as that used in schools, there will be cases of lack of communication with the teachers, thus resulting in misunderstandings when giving instructions to the child, how the child is behaving, or the mode of learning. Cognitive emotional regulation can also be reduced by socioeconomic predicaments like insecurity of food supply, substandard living, or professional pressure that parents are facing, which exacerbate other outcomes of ADHD. Such gaps highlight the necessity of equity-based policies that align mental health services, bilingual education, and parental involvement to address students who have to come to grips with both linguistic and cognitive difficulties.

### **Practical Implications**

#### **How Teachers and Advisors Can Better Support Bilingual ADHD Students**

Teachers and academic advisors must meet the needs of bilingual ADHD students to identify their needs. Firstly, teachers should be aware that linguistic and cognitive issues typically intensify the problems that such students experience (Ducoli, 2023). Daily communication, well-organized feedback, and personal goal setting can keep the students on the path. When expecting bad performance, an option that teachers should not attempt to conclude is that the lack of performance is attributed to a lack of effort; instead, it is necessary to also look at the possibilities of executive dysfunction or language interference. Advisors, in turn, should promote early screening, assist them in using services such as bilingual counseling, academic coaching, or language labs, and ensure that the interventions are responsive to both linguistic proficiency and attendance-related issues.

Diaz-LePage et al. (2024) stress that student identity is linked to linguistic and cultural affirmation. Hence, engagement of advisors and instruction based on cultural competency is the key to success. Motivation and self-efficacy: Encouraging students to utilize their language abilities as resources in their academic work will motivate them and help encourage classroom participation. To legitimize the identity of these students, the teachers may include culturally relevant cases, bilingual writings, and the opportunity to switch codes. Advisors are also supposed to help the students develop time management tools and help them create a form of academic roadmaps that are specific to their pace of learning (Watson & Westby, 2025). ADHD and bilingualism faculty development also makes sure that there are inclusive and informed responses to student needs.

#### **The Need for Tailored Accommodations (for example, Extended Time, Language Support)**

The accommodation usually provided for ADHD, including additional time in examinations or reducing the distractions, is useful but might not be enough for bilingual students. Such students typically need extra linguistic provisions to help them process academic work correctly and confidently. Language-related pressure can be reduced by offering simplified directions, giving the student access to bilingual glossaries, or permitting the oral responses to be given in a language in which the student is strong. There must also be extended time to cover internal translation requirements, including reading comprehension and written activities (Koder et al., 2022). In the situation where the bilingual ADHD students are required to work as fast and on the same language level as their monolingual neurotypical peers, they become unable to handle the cognitive load and get lost or fail in their education.

Brouillard and Byers-Heinlein (2023) emphasize that bilingual students with ADHD will most gain out of the dual accommodation, which requires a two-fold approach to meet the needs of linguistic processing limitations and those affecting executive functions. These must be written down in IEPs or learning support agreements and updated regularly to reflect the changing needs. Barriers can be minimized by having such supports as language-accessible online learning, peer-note-sharing, or bilingual teacher aids. It is also upon institutions to make the accommodations culturally responsive and to fairly put them in place. Failure to individualize accommodation with a bilingual ADHD perspective leads to an inability to create a proper diagnosis, resulting in misdiagnosis, ineffective performance, and higher attrition rates, especially within the underrepresented student populations (Vera et al., 2025).

### **Recommendations for an Inclusive Curriculum**

A comprehensive curriculum for bilingual students with ADHD needs to consider not only the accessibility but also the cognitive aspects. This includes creating a curriculum and an evaluation to ensure that a wide range of learners is accommodated without compromising academic excellence. The presentation of information guided using visual aids, interactive, and multimodal resources can support better understanding and retention among students who are not doing well under traditional text-based instruction (Barahona-Cevallos et al., 2022). The curriculum is also made to be more relatable by having bilingual texts, translated materials, and culturally relevant content that minimizes alienation. In the case of ADHD learners, organized lesson plans that are formatted the same way and have a clear goal can reduce distractions and improve attention. Educators should organize their tasks in mini-units and add frequent check-ins to help their executive functioning and minimize cognitive overload.

According to Efthymiou et al. (2025), all curriculum design needs to be inclusive by not only making it accessible but also involving neurodiverse learners. These are various forms of allowing students to prove what they have learned, with some options being oral presentations, visual portfolios, or even project-based assessment forms instead of regular exams. This flexibility allows bilingual ADHD students to take advantage of their strengths. Furthermore, incorporating cultural content between the disciplines leads to inclusiveness and helps the students connect with what they are learning. Teachers should also explicitly teach academic language forms and scaffolding to develop students' literacy confidence in the long run. Making curriculum inclusive is not only a good idea-it is a core value of equity in multilingual and neurodiverse classrooms.

### **Importance of Recognizing Strengths, Not Just Deficits**

Too much is made of what bilingual ADHD students cannot do when dealing with an educational system that only diagnoses students based on the inability to do something, leaving out their special gifts and adaptive abilities. These learners can have the ability to be more empathetic, brainstorming skills, and multicultural communication capacity- something valued in any learning environment. Academic self-esteem is also facilitated by recognition of strengths and encourages students to become more engaged in their education (Perez, 2025). The educators ought to allow the students to demonstrate their bilingualism by tutoring, organized cultural demonstrations, or multilingual projects. Conceptualizing bilingualism as a cognitive benefit, as opposed to an obstacle, may assist the students in viewing themselves not as failing students but rather as competent contributors.

Charis et al. reveal that Diaz-LePage et al. (2024) are convinced that developing strengths-based identities in bilingual ADHD students minimizes stigma and promotes self-advocacy. The current academic advising practices and classroom strategies should be adjusted toward the neurodiversity and multilingualism-celebrative approach. The focus of teachers should not be to instill obedience and performance but to promote progress and endurance. According to Black (2023), ADHD students perform well when they feel valued and when their identities are represented in classroom settings. Curricula should be in the form of universal design of learning (UDL), which supports and embraces diverse learning pathways and interaction flexibility. Self-awareness of strengths will provide not only the basis to succeed in school, but in subsequent personal empowerment as well.

## **2. RESEARCH GAPS AND RECOMMENDATIONS**

### **Few Studies Directly Target Bilingual ADHD College Students**

Although the field of neurodiversity and multilingualism seems to be gaining much interest lately, there is still a severe research gap regarding bilingual college students this disorder. The majority of the literature either focuses on bilingualism or ADHD and therefore does not address the effect of these two multifaceted conditions on each other within a higher education context. Such negligence is an issue as bilingual students with ADHD have their unique challenges that are not covered when the intervention is targeted at each group separately. Koder et al. (2022) underline that although bilingualism can positively contribute to executive function, its impact on individuals with cognitive impairments, such as ADHD, is not currently evident. Moreover, most available research works are concentrated on children or the population rather than on young adults who have to face the academic and social realities of getting a college degree. This prevents the institutions from planning evidence-based supports specific to this intersection group. As a result, many students remain underdiagnosed, misaccommodated, or unaccommodated on higher education campuses.

### **Need for More Culturally Diverse Samples**

Existing literature on bilingualism and ADHD heavily depends on a Western, monolingual, or middle-class group, where the generalization of the results is limited. This research, which mirrors the life experience of bilingual students of different cultural, ethnic, and socioeconomic groups, is urgently needed. According to Vera et al. (2025), the bilingual students representing the immigrant or minority communities might face other impediments like stigma, underdiagnosis, or service inaccessibility. Such contextual issues may enormously influence the symptom presentation of this disorder as well as language development. Without inclusive sampling, the research result can confirm the biased assumptions without the researcher noticing, and miss out on culturally particular coping techniques and coping strength. Diaz-LePage et al. (2024) state that it is equally important to include the views of bilingual professionals and families to obtain the wider social and emotional consequences. A better depiction of the evidence base would assist in making interventions, screenings, and accommodations culturally appropriate, linguistically inclusive, and equally viable to all students.

### **Future Research Should Explore Intervention Programs**

Intervention research is needed more and more that buttresses the special needs of bilingual students with this disorder, most especially at the post-secondary level. Some promising strategies exist, such as dual-language education, executive function coaching, or culturally responsive teaching. However, they have not been applied, and it is unlikely to be tested at the experimental stage in this population. Research should continue to determine the effectiveness of special interventions that comprise a unity of language support and management of ADHD. As a case in point, Barahona-Cevallos et al. (2022) propose incorporating technology-enhanced learning tools, such as bilingual educational games, to facilitate engagement and the development of skills. In the same line of arguments, Watson and Westby (2025) suggest a cross-disciplinary program that would engage teachers, clinicians, and language specialists in coordinated support. The assessment relating to intervention studies needs to introduce the emotional well-being, identity formation, and long-term retention besides the academic performance. Established evidence-based best practice would enable educators and institutions to build an inclusive environment so that the bilingual ADHD students can be accommodated and flourish.

## **3. CONCLUSION**

### **Bilingualism Can Offer Both Benefits and Challenges**

Bilingualism is a multidimensional phenomenon influencing higher education students with ADHD, which has both positive and negative effects on them, while demonstrating challenges in its way. On the one hand, multilingualism may improve the inhibition, switching between tasks, and cognitive flexibility of the executive functions, which are typically poor in ADHD patients. Bilingual students can also become more metalinguistically aware and culturally competent, and solve problems better (Huff, 2024). However, these are not unconditional and can be significantly contingent on such factors as language proficiency, cognitive load, etc. Among most learners, working memory shortcomings may be exacerbated by the demands of mastering languages, switching fatigue may increase, or academic processing may slow down. Interference in language and reduced academic performance can also exacerbate this impairment when these areas are accompanied by the impulsivity or disorganization that an ADHD patient may display. Bilingualism, therefore, does not necessarily present only healthy or only unhealthy conditions to the students with this disorder; it is dependent on the context, and it should be assessed individually and with a grain of salt.

### **Impact Varies by Individual Factors**

Bilingualism's impact on ADHD students is highly personal and depends on several interdependent factors. Comprehension of language, language learning age, language usage situation, and extent of deleteriousness of ADHD symptoms all contribute to deciding whether a bilingual nature will enhance or restrain academic performance (Zheng et al.,2025). When students start learning two languages at a young age and achieve equal degrees of skill in the two languages, they are more likely to reap the cognitive advantages synonymous with being bilingual, such as having a better memory and being more adaptable. Conversely, the students with prevailing or lagging bilingualism, particularly with heightened ADHD symptom severity, can be subjected to reading, testing, and communication difficulties. Access to resources and support is also dependent on cultural and socioeconomic background, and this determines the way students experience and deal with their bilingual identity and ADHD. Therefore, a cookie-cutter style of assisting such learners is not good enough. Instead, the interventions and educational approaches should be individualized and culturally sensitive to acknowledge the diversity of the bilingual students with this disorder.

### With the Right Support, Bilingual ADHD Students Can Thrive

Bilingual ADHD students may achieve excellent academic and social results if they get the help they need. Language-processing and attention-related barriers can be controlled using adequate accommodations: extended time, simplified language, bilingual resources, and executive function coaching. In addition, linguistic diversity and curriculum design with an appreciation of linguistic diversity help students feel a greater sense of belonging, enabling them to take a deeper interest in learning. A strengths-based approach can enable students to feel more confident and persistent; advisors and educators can focus on deficits with equal emphasis on positive qualities such as multilingualism and creativity. As demonstrated in the study by Diaz-LePage et al. (2024) and Brouillard and Byers-Heinlein (2023), the recognition of linguistic and neurodiverse identities leads to an increase in academic participation and resilience. Thus, institutions will need to invest in culturally responsive policies, trans-disciplinary support teams, and evidence-based interventions to not leave bilingual ADHD students behind. These students will be able to work up to their academic potentials at the same rate given the same attention and be luminous at college and future lives.

### REFERENCES

- [1] Barahona-Cevallos, R. A., Moya-Suárez, J. A., Navas-Moya, M. P., & López-Chico, X. R. (2022, March). Ordering Algorithm as a Support for Children with ADHD Through the Development of Bilingual and Interactive Videogames. In *International Conference on Computer and Communication Engineering* (pp. 14-25). Cham: Springer International Publishing.
- [2] Black, M. (2023). When Fish Climb Trees: Discovering Resources for Students with Attention Deficit Hyperactivity Disorder.
- [3] Brouillard, M., & Byers-Heinlein, K. (2023). The ADHD vocabulary size advantage: Monolingual and bilingual young adults with ADHD have larger vocabularies than controls. *Preprint*, 282.
- [4] Bialystok, E., Craik, F. I., & Luk, G. (2024). Bilingualism: Consequences for Mind and Brain. In *Where Language Meets Thought* (pp. 123-148). Routledge.
- [5] Climaco, B. L. Teaching English as an additional language to learners with disabilities: a systematic review of literature on challenges, strategies, and methodological procedures used when teaching students with ASD and/or ADHD.
- [6] Diaz-LePage, A., Lauer, M., Santa-Sosa, E., Abdul-Chani, M., Garcia, A., Hoet, A., ... & Marchante-Hoffman, A. (2024). En Sus Propias Palabras (in their own words): Reflections of Spanish–English bilingual psychologists and trainees in the United States. *Training and Education in Professional Psychology*, 18(1), 78.
- [7] Ducoli, M. (2023). Bilingualism and (developmental) language disorders. An overview. *Proceedings of the International Summer School of Bilingualism and Multilingualism (ISSBM2022)*.
- [8] Efthymiou, E., Katsarou, D. V., Sofologi, M., Argyriadis, A., Argyriadi, A., & Megari, K. (2025). Neuropsychological Interventions in Inclusive Education: Strategies for Supporting Cognitive and Emotional Development in Diverse Learners. In *Clinical Applications of Pediatric Neuropsychology from Infancy to Adolescence* (pp. 411–448). IGI Global Scientific Publishing.
- [9] Huff, P. E. (2024). *Attention Deficit Hyperactivity Disorder in School-Age Children: A Manual for Latinx Parents* (Doctoral dissertation, Alliant International University).
- [10] Köder, F., Sharma, C., Cameron, S., & Garraffa, M. (2022). The effects of bilingualism on cognition and behaviour in individuals with attention deficits: A scoping review. *Frontiers in Psychology*, 13, 1057501.
- [11] Konstantina, A., & Evdoxia, F. Fostering Multilingual Proficiency: Trilingualism in Greek Primary Schools. The case of children with learning disabilities.
- [12] López, R. M., Carales, V. D., Farmer, M. J., & Hocking, C. (2025). Examining the Educational Experiences of Latina Early College High School Students Through a Community Cultural Wealth Framework. *The Urban Review*, 1–23.
- [13] Mohebbi, A. (2023). Optimising language learning for students with ADHD: Strategies for cultivating attentional mechanisms. In *Psycholinguistics-New Advances and Real-World Applications*. IntechOpen.

- [14] Perez, V. (2025). *Perceptions of Giftedness and Cultural Diversity in Teacher Preparation Relating to Latinx Bilingual and Twice-Exceptional Students* (Doctoral dissertation, Cleveland State University).
- [15] Raad, B., & Ghafar, Z. N. (2025). The Impact of Attention Deficit Hyperactivity Disorder on Language Learning: a Narrative Review. *International Journal of Applied Educational Research*, 3(3), 179-190.
- [16] Rafailov, S. H. (2024). *The Effect of Attention on Elementary Word Reading in English-French Bilinguals* (Master's thesis, University of Toronto (Canada)).
- [17] Santa Cruz-Rivera, E. I. (2025). *The Conditional Effects of ADHD on Predictors of Flourishing in a Population of Male Ethnic Minority College Students: The Role of Depression, Discrimination, and a Sense of Belonging* (Master's thesis, University of South Alabama).
- [18] Vera, E. M., Yanuaria, C., & Furtado, C. (2025). Understanding College Access of Immigrant-Origin, Emergent Bilingual Learners. *Journal of College Student Development*, 66(3), 284-301.
- [19] Watson, S. M., & Westby, C. (2025). Multilingual Learners With Attention-Deficit/Hyperactivity Disorder and Developmental Language Disorder: Assessing an Underserved Population of Learners. *Perspectives of the ASHA Special Interest Groups*, 10(1), 44–60.
- [20] Williams, A. I., Haack, L. M., Hawkey, E., Chung, S., Ly, J., & Pfiffner, L. J. (2023). Academic competence, organizational skills, and treatment response among bilingual and monolingual children with attention deficit hyperactivity disorder. *Translational Issues in Psychological Science*, 9(4), 433.
- [21] Zheng, Q., Hui, B. K. H., Li, J., & Shum, K. K. M. (2025). Adaptive Functioning in School: A Multidimensional Questionnaire for Assessing Functional Challenges Beyond Symptoms in Students with ADHD. *Child Psychiatry & Human Development*, 1–20.