

# Exploring Teachers' Perceptions of Classroom-based Accommodation Among Students with ADHD in Inclusive Primary Schools in Buea, Cameroon

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## ABSTRACT:

The study examined teachers' perceptions of the effects of classroom-based accommodations for children with or at risk of attention-deficit/hyperactivity disorder (ADHD) in four inclusive primary schools. The research involved 20 teachers and 27 students, ages 7-13, identified using an adapted DSM-5 checklist. Following two weeks of professional development sessions with selected teachers focused on ADHD classroom management, an eight-week intervention was implemented. Data was collected through a teacher feedback survey and classroom observations. Findings showed that teachers across all three intervention groups observed improvements in students' concentration, peer socialization, and academic performance. Additionally, a combined intervention strategy comprising environmental modifications and behavior management was perceived as the most effective classroom accommodation, with about 90% of teachers rating it as effective. The study offers valuable insights into inclusive classroom practices that support students with or at risk of ADHD, especially in the African education context, along with recommendations for future research.

**Keywords:** Inclusive Education, Attention Deficit Hyperactivity Disorder, Classroom-Accommodations, Teachers' Perceptions.

## INTRODUCTION

Attention-deficit hyperactivity disorder (ADHD) affects an estimated 5% to 10% of school-aged children worldwide and is one of the most common behavioral disorders diagnosed in childhood, and one of the many classroom behavior issues that inclusive classroom teachers face (American Psychiatric Association, 2013). Given that ADHD affects roughly 5.29% of people worldwide, it is

critical to employ evidence-based practices that can foster inclusivity and offer targeted support to all students who are at risk (APA, 2013). According to the American Psychiatric Association, ADHD is a neurodevelopmental disorder that usually manifests in childhood but may persist into adolescence and adulthood. Persistent patterns of impulsivity, hyperactivity, and inattention are the main symptoms of ADHD. These symptoms can significantly impact a person's social interactions,

academic achievement, and other aspects of their life (American Psychiatric Association, 2013). Research shows that ADHD has a direct impact on academic performance, as evidenced by grades, participation in extracurricular activities, and school dropout rates (McAuley, 2009). Besides creating academic challenges, ADHD also affects social functioning since children may have trouble controlling their emotions, with some not able to keep their hands to themselves, struggle with conversational skills, and lead to the inability to make and keep friends (National Resource Center on ADHD, 2016).

Classroom-based accommodations refer to specific adjustments and techniques educators can use to support teaching and learning for students with or at risk of ADHD and other related challenges in their learning journeys, ensuring they have access to the same learning experiences as their peers. These accommodations involve modifying the learning environment or structures to provide the support students need to engage effectively with the curriculum (The National Resource Center on ADHD, 2016). The effectiveness of classroom-based accommodation for students with ADHD increases when they are tailored to meet the individual needs of students, considering the severity of their ADHD symptoms and any co-occurring conditions (National Resource Center on ADHD, 2016). Moreover, the Diagnostic and Statistical Manual (DSM-IV) categorizes ADHD symptoms into inattention and hyperactive-impulsive behaviors, emphasizing that the appropriateness of accommodation is determined by the extent to which these symptoms affect student performance (APA, 2013).

In response to the ADHD crisis in schools around the world, researchers have advanced educational arguments supporting the use and efficacy of harnessing different strategies for managing children with ADHD, such as behavior management and stimulant medication, and environmental adjustments, as the most widely used interventions. Additionally, extensive empirical research has been conducted in the United States K-12 educational context, focusing on evidence-based classroom accommodations designed for students

with ADHD. For instance, a foundational study by Dupaul and Weyandt (2006) reported strong support for behavioral interventions in reducing disruptive and off-task behaviors in children with ADHD. Although evidence for academic and social interventions was weaker, the potential for effectiveness was suggested. Gaastra et al. (2016) assert that classroom interventions effectively reduced off-task and disruptive behavior in children with ADHD symptoms, particularly noting significant effects in both withdrawal from studies (WSD) and self-regulation studies (SSD). Consequence-based interventions in WSD and self-regulation strategies in SSD yielded the most significant effects, particularly in general education contexts, benefiting peers' behavioral and academic outcomes. Furthermore, classroom-based interventions for students with ADHD were found to be moderately effective (Harrison et al., 2019). They also highlighted that both instructional and self-management interventions met the evidence-based standards set by the What Works Clearinghouse (WWC), with behavioral interventions demonstrating the most remarkable success when selected through functional behavior analysis.

Despite the high prevalence of ADHD among young school-aged children worldwide, there has been a concerning lack of action in most schools in African countries, such as Cameroon, to screen, assess, and provide timely support to students who need tailored accommodations in inclusive classroom settings. This gap is particularly alarming given that ADHD is not a uniform condition since its symptoms can vary significantly from one student to another. While some students may predominantly exhibit signs of hyperactivity and impulsivity, others may struggle primarily with attention deficits (American Psychiatric Association, 2013). Moreover, many at-risk students with ADHD face significant challenges across both domains, which can further exacerbate their educational struggles (Barkley, 2015). Children with ADHD present serious challenges within the school environment since they tend to be easily distracted, find it hard to stay focused on tasks, and frequently disrupt classroom activities (American Psychiatric

Association, 2013). Their inability to follow directions and maintain attention to a specific task is a constant source of irritation to teachers (Kirk, 2000). The challenges associated with ADHD can create strain not only on the child but also on classroom teachers. The purpose of this study was to examine the perceived impact of classroom-based accommodations on academic performance and social skills among elementary students at risk of ADHD in inclusive classrooms in Buea, Cameroon.

The educational landscape in Cameroon's primary schools still faces a significant gap in addressing the needs of children with ADHD, despite existing laws supporting children with disabilities. There is a notable lack of information on the use of adequate, evidence-based classroom accommodation to support these students, which may hinder teachers' ability to implement impactful interventions. This gap underscores the urgent need for further research into how teachers perceive different types of ADHD interventions, as well as a more comprehensive understanding of the disorder's complexities in the school environment. Additionally, the challenges posed by ADHD can disrupt not only the learning experience of the affected children but also that of their peers, ultimately impacting academic performance and the formation of positive social relationships within inclusive classrooms.

The aim was to address the urgent need for teacher training on screening and supporting children at risk of ADHD in inclusive classrooms. The study concluded by assessing the perceived effectiveness of three specific accommodations for students' academic and social skills. Specifically, the study examined teachers' perceptions of three types of classroom-based accommodation: environmental modifications, behavior management strategies, and a combined approach tailored to the specific ADHD subtype. In this study, the researcher sought to answer the following questions:

- (1) How do teachers perceive the use of environmental modification on the concentration level of students with inattention?
- (2) How do teachers perceive the use of behavior management in enhancing the socialization skills of students with hyperactive and impulsive subtypes?
- (3) How does a combined intervention impact the academic and social skills of students with combined subtypes of ADHD?

## LITERATURE REVIEW

### Classroom-Based Accommodation for Students with ADHD

The existing research supporting this study was drawn from both the U.S. and African research contexts. In the Cameroonian school context, a relatively small number of studies (e.g., Efana, 2016; Njuwa et al., 2020) have specifically examined the identification and classroom support for children with ADHD, underscoring the urgent need for more comprehensive research. Efana (2016), in a quasi-experimental study with 20 participants diagnosed with ADHD, reported promising results using a Token Economy, with improvements in academic performance in mathematics. However, the small sample size raises questions about the generalizability of the findings. Additionally, while Njuwa et al. (2020) identified several factors associated with ADHD symptoms among medical students in Cameroon, such as chronic illnesses and family histories of ADHD, the research remains insufficient to draw robust conclusions. Moreover, studies from other African countries, such as South Africa, Uganda, and Nigeria, highlight gaps in the knowledge and management of ADHD among primary school teachers. Topkin et al. (2015) observed that only 45% of South African teachers demonstrated a proper understanding of ADHD symptoms and management, revealing a concerning prevalence of "don't know" responses at 31%. This underscores the need for enhanced training and interventions in educational settings. In contrast, Shehata et al. (2016) suggested that structured teaching programs can effectively enhance teachers' knowledge and positively influence their attitudes and behavioral strategies, as evidenced by significant improvements following a quasi-experimental design study.

Numerous studies evaluating the effectiveness of classroom accommodations for children with ADHD in U.S. K-12 school settings have established that behavior therapy, stimulant medication, and a combination of both consistently demonstrate efficacy (Dupaul et al., 1998; National Institute of Mental Health, 1999; Dupaul & Weyandt, 2006; Gaastra et al., 2016). For instance, class-wide peer tutoring increased academic engagement and reduced off-task behavior among most participants. The findings showed that 50% of students with ADHD improved in math and spelling following the peer tutoring intervention (DuPaul et al., 1998). The token Economy and self-evaluation method resulted in increased appropriate behavior for three fourth-grade boys diagnosed with ADHD, even without medication. This approach was effective in both classroom and recess settings, and the observed behavior continued to improve as the token system gradually faded (Hoff & DuPaul, 1998). The Multimodal Treatment of ADHD highlighted the extensive nature of combined treatment approaches, involving 579 children aged 7 to 10. Participants were randomly assigned to four treatment groups: one receiving stimulant medication, another undergoing behavioral interventions, and a third receiving a combination of both. The study concluded that both medication management and combined interventions resulted in significant reductions in ADHD symptoms (National Institute of Mental Health, 1999). Swanson et al. (2001) reinforced this finding by reporting a 68% success rate in the combined group, compared to significantly lower rates in other groups. Dupaul and Weyandt (2006) reported strong support for behavioral interventions in reducing disruptive and off-task behaviors, although they noted weaker evidence for academic and social interventions, indicating potential effectiveness.

In another study, Gaastra et al. (2016) found that classroom interventions effectively reduced off-task and disruptive behaviors, particularly in withdrawal from studies (WSD) and self-regulation studies (SSD), benefiting not only children with ADHD but also their classmates. Furthermore, Harrison et al. (2019) conducted a systematic review that

highlighted the moderate effectiveness of classroom-based interventions for students with ADHD. Their findings confirmed that both instructional and self-management strategies met the evidence-based standards set by the What Works Clearinghouse, with behavioral interventions showcasing the greatest effectiveness in improving outcomes for students with ADHD.

The research landscape from an African context reveals a limited understanding of classroom accommodation and its implementation, underscoring a critical need for inclusive classroom teachers to know how to identify and tailor accommodation strategies to improve outcomes for students with ADHD. However, research from the U.S. K-12 educational setting highlights the importance of leveraging multifaceted treatment approaches for students with ADHD, reinforcing the effectiveness of combining behavioral interventions and medication to enhance academic and behavioral outcomes.

## MATERIALS AND METHODS

### Design

In this study, a survey design that incorporated both closed- and open-ended questionnaires, along with a classroom observation guide, was used to investigate teachers' perceptions of three distinct classroom-based interventions aimed at enhancing students' academic and social skills. A survey design provides a quantitative description of trends, attitudes, and opinions in a population, or tests for associations among variables within a population (Cresswell & Cresswell, 2018). The primary objective was to elucidate the perceived impact of these interventions among groups after an 8-week implementation period. The cross-sectional survey design was preferred over an experimental design due to ethical considerations surrounding the random assignment of students and the need to capture the nuanced perceptions of teachers who implemented these interventions firsthand. This approach enabled a deeper understanding of how the interventions affect student academic performance and behavior. Moreover, the cross-sectional nature of the survey facilitated the collection of immediate feedback, providing

valuable insights while minimizing logistical challenges often associated with longitudinal studies.

### Participants/Sample

All primary school students in the study population were considered during the 2018-2019 school year. Approximately 1,495 students were enrolled in both government and private primary schools in the city of Buea, in Cameroon's Southwest Region, during that same academic year. Meanwhile, the study's target population comprised all learners in grades 3-6 who exhibited symptoms of ADHD, along with their teachers and assistant teachers who worked directly with these students in inclusive classrooms. Initially, data were collected from four primary

schools participating in the study. These sample schools were selected for the study because of their commitment to inclusive education. A stratified sampling design was employed to identify twenty (n=12) inclusive classroom teachers and their Assistants (n = 20) and twenty-seven at-risk students (n = 27), aged 7 to 13 years. These participants were carefully selected based on specific criteria. To qualify for the study, each student was either identified with key characteristics of attention deficit hyperactivity disorder (ADHD) or deemed at risk for developing the condition. This identification process ensured a focused examination of the unique learning challenges these students face and the strategies their educators employ.

Table 1: The Sample distribution of Schools and Intervention types

| Intervention Categories /Sub-type of ADHD                    | Stats | Schools |           |       |                 | Total     |
|--------------------------------------------------------------|-------|---------|-----------|-------|-----------------|-----------|
|                                                              |       | B.N.P.S | S.T.I.B.S | C.E.C | C.S Great-Soppo |           |
| Combined intervention (combined ADHD subtype)                | N     | 5       | 4         | 1     | 1               | <b>11</b> |
|                                                              | %     | 45.5%   | 66.7%     | 16.7% | 25.0%           | 40.7%     |
| Classroom Modification (inattention ADHD subtype)            | N     | 0       | 0         | 2     | 1               | <b>13</b> |
|                                                              | %     | .0%     | .0%       | 33.3% | 25.0%           | 48.1%     |
| Behavior Management (impulsive and hyperactive ADHD subtype) | N     | 6       | 2         | 3     | 2               | <b>3</b>  |
|                                                              | %     | 54.5%   | 33.3%     | 50.0% | 50.0%           | 11.1%     |
|                                                              | N     | 11      | 6         | 6     | 4               | <b>27</b> |
|                                                              | %     | 40.7%   | 22.2%     | 22.2% | 14.8%           | 100.0%    |

From table 1 above, twenty-seven students (N=27), aged 7 to 13 years, who were identified as having or at risk for ADHD, underwent a detailed assessment of their symptoms and corresponding interventions. Most eligible students exhibited core inattention symptoms. Specifically, 48.1% of participants (N=13) indicated these symptoms and received targeted environmental modifications to improve their concentration. Additionally, 11.1% of the students (N=3) displayed prominent symptoms of hyperactivity and impulsivity and were placed on a behavioral management program designed to

enhance their social skills. Notably, 40.7% (N=11) of the students presented both inattention and hyperactivity/impulsivity symptoms, qualifying them for a combined intervention approach, and received both interventions, incorporating environmental modifications and behavioral management strategies.

### Instruments

In this study, two instruments were used for data collection. The first was a Behavior Rating Scale, an observational checklist designed by the researcher

to track and record student behavior before and after an intervention implemented across various classrooms. The second instrument was a teachers' questionnaire, distributed at the end of the intervention period. The survey included both closed-ended and open-ended questions, allowing educators to provide detailed feedback on students' classroom behavior and academic performance following the 8-week intervention. Instruments for classroom interventions included the following:

#### **A Classroom Modification Intervention**

**Protocol:** Teachers implemented a list of classroom adjustments for students who exhibited symptoms of inattention, such as difficulty following simple instructions and challenges with classroom organization, adapted from the National Resource Center on ADHD (2016) guide for teachers. Over the 8-week intervention period, these adjustment strategies were used to support their learning experiences.

- Students were positioned at the front of the classroom to minimize internal and external distractions and seated next to well-behaved peers.
- Clear daily classroom rules and schedules were established.
- Frequent follow-up was conducted to ensure understanding, and lessons were presented in various formats, incorporating colors and large fonts to enhance engagement.
- Additionally, lessons were broken down from simple to complex concepts, allowing students extra time to complete assignments and classroom tasks.

**A Behavior Management Plan:** Students exhibiting significant symptoms of hyperactivity and impulsivity, such as fidgeting, difficulty staying seated, excessive talking, and trouble taking turns, participated in an 8-week behavior management plan with their teachers, which incorporated several strategies.

- First, their seating positions were adjusted in an area free from distraction, pairing the child with a peer who can model appropriate behavior.

- Positive behaviors were immediately reinforced with positive reinforcers, such as praise and clapping, when students exhibited appropriate behaviors, such as raising their hands and waiting to be called.
- Negative behaviors were either ignored or punished with tasks like sweeping the classroom after school or missing a lunch break.
- To further encourage good behavior, tangible rewards, such as sweets and biscuits, were also used.
- The plan also emphasized the need for frequent monitoring of students during lessons and providing immediate feedback when positive behaviors were exhibited (The National Resource Center on ADHD, 2016).

**A Combined Intervention Plan:** For students with the combined subtype of ADHD, a more comprehensive intervention plan was adapted from the National Resource Center on ADHD (2016). Over an eight-week period, teachers in this subgroup implemented both classroom modifications and behavioral management strategies.

- The students were positioned strategically at the front of the classroom, alongside well-behaved peers, to reduce distractions.
- A structured environment was created with clearly defined daily rules and schedules. Instruction was diversified to cater to varying learning styles, employing visual aids, colors, and interactive activities to maintain engagement.
- Some students were placed into classroom leadership roles and frequently received one-on-one feedback. Positive behaviors were reinforced through praise and tangible rewards, while minor infractions were addressed with appropriate consequences, such as extra time.
- Regular monitoring and immediate feedback during classroom activities. This combined approach aimed at addressing

attentional challenges while simultaneously managing impulsiveness and hyperactivity.

### Procedure

The researcher obtained permission from all four institutions and, after securing the headteachers' approval, visited the four selected primary schools to conduct a three-month study. During the first four weeks, children exhibiting ADHD symptoms were formally screened with teachers' active participation, who also offered valuable insights due to their familiarity with the condition. Simultaneously, the researcher conducted classroom observations to evaluate the learning environment and teachers' behavior-management strategies for students with ADHD. After this

phase, teachers received two weeks of intervention training and, under the researcher's supervision, launched an eight-week intervention program targeting these different groups of children with ADHD.

### Data Analysis

The researcher used IBM SPSS Statistics (version 25) to conduct a comprehensive analysis of teachers' survey responses. To address the three research questions, the findings were presented using descriptive statistics, including detailed percentages, frequency tables, and visually engaging charts. This approach provided a clear, insightful overview of the data, facilitating a deeper understanding of the survey responses.

## RESULTS

### Participants' Demographic Information

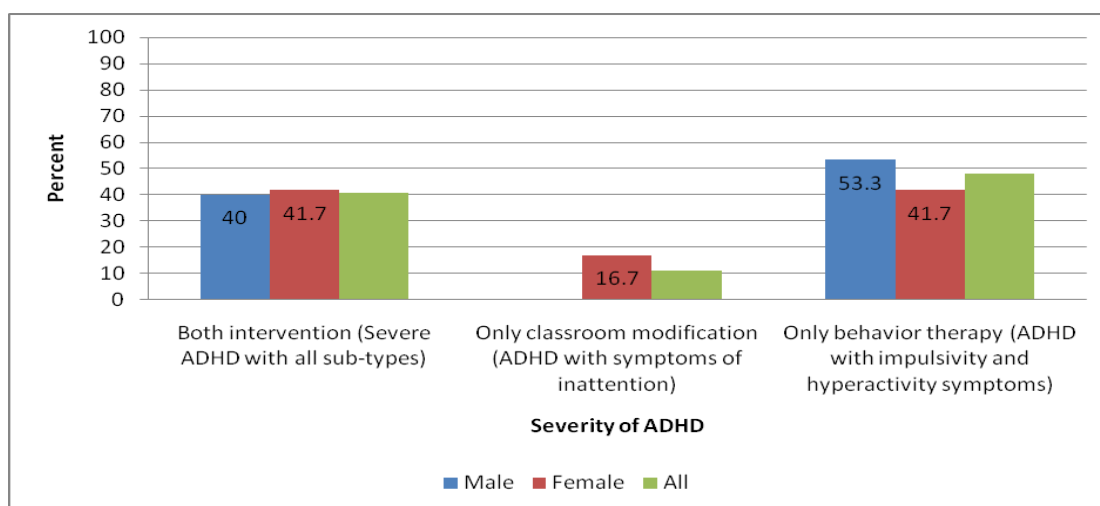


Figure 1: Descriptive analysis of gender disparities among students identified with ADHD

Among the 27 eligible participants, 15 (55.6%) were male and 12 (44.4%) were female, indicating a higher prevalence of ADHD symptoms among males than among females. Regarding interventions, 41.7% of female participants benefited from a combined approach that included various therapeutic strategies, whereas 40% of male participants received the same comprehensive treatment. Regarding classroom modifications, only

a small percentage of students received this intervention: 16.7% of females and 6.7% of males. Behavioral management showed a larger gender difference, with 53.3% of males receiving these interventions compared to 41.7% of females.

**(1) How do teachers perceive the use of environmental modification on the social skills of students at risk of inattentive symptoms?**

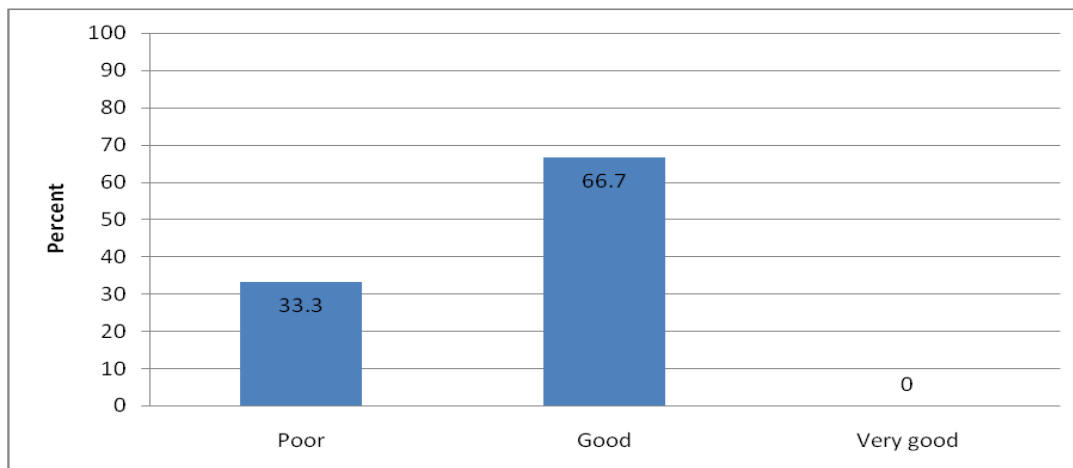


Figure 2: The frequency distribution of teachers' perceived impact of environmental modifications on concentration skills.

According to the histogram, most teachers (66.7%) reported that implementing environmental modifications and adjustments was beneficial for their students, who showed improved task concentration as a result of classroom changes. This positive perception was associated with fewer distractions and better organization. Conversely, 33.3% of teachers reported no improvement in their

students after eight weeks of adjusting to the classroom setting.

**(2) How do teachers perceive the effect of behavior management on the social skills of children with predominantly hyperactive/impulsive symptoms?**

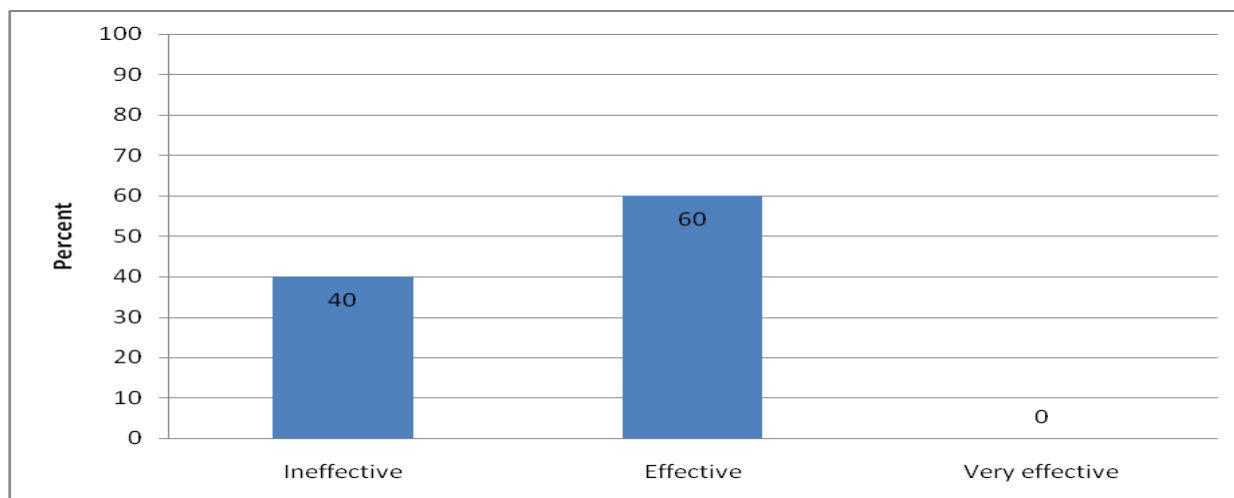


Figure 3: Frequency of teachers' perceived impact of behavior management on social skills.

The findings show that 60% of teachers in this intervention group believed that using behavior modification was effective, as most students improved their social skills in the classroom, such as talking less and playing or fidgeting less during exercises. They were able to communicate more effectively with their peers. In contrast, 40% of teachers reported no improvement in their students' social skills during the intervention period. Overall,

these results suggest that employing these specific behavior strategies for children with hyperactive or impulsive symptoms may have a moderate impact on their social skills. This moderate perceived effect might be due to the limited time the researcher had to follow up on the intervention and the challenges of changing inappropriate classroom behaviors within a short time frame.

### (3) How do teachers perceive a combined intervention on the academic and social skills of children with a combined subtype of ADHD?

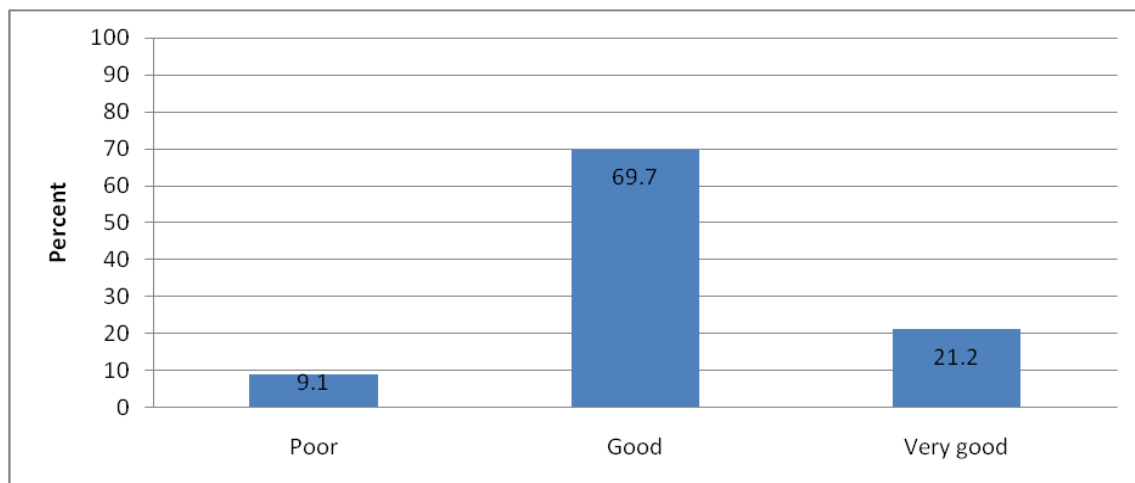


Figure 4: Frequency of teachers' perceived impact of a combined intervention.

For the third intervention group, an impressive 90.9% of teachers reported that a combined intervention approach was “good” and “very good” as their students demonstrated significant improvement in both academic performance and social skills management, enabling them to complete their academic tasks more effectively and exhibiting fewer behavioral symptoms of ADHD. Conversely, only 9.1% of teachers indicated that their students continued to display the same ADHD symptoms even after the eight-week intervention period. These findings suggest that a combined intervention can enhance students' learning outcomes, as nearly all teachers perceived it as the most impactful classroom-based accommodation for children with combined ADHD symptoms, incorporating both environmental classroom modifications and behavior management strategies.

## DISCUSSION

The study aimed to investigate teachers' perceptions of the effects of classroom-based accommodations for academic and social skills among children at risk of ADHD. The Diagnostic and Statistical Manual for Mental Disorders (DSM-5) tool was adapted and used to identify a total of (N=27) 27 learners at risks of ADHD in the study, thirteen (N=13) were identified with key symptoms of inattention, three (N=3) were identified with key symptoms of hyperactive/impulsive subtype and eleven (N=11) were identified with combined

symptoms. The findings revealed that classroom-based interventions can directly impact students' learning and social skills development, with most teachers reporting improvements in their students, particularly those who participated in the combined intervention.

Findings from the first research question revealed that a majority of teachers had a positive perception that implementing classroom environmental adjustment for children with or at risk of the predominant inattentive subtype of ADHD can impact them. The findings are supported by previous studies, which emphasized the importance for teachers in mainstream classrooms to understand and apply environmental modification strategies tailored to the unique needs of children with ADHD (Christopher & McLaughlin, 2004). Furthermore, the findings align with the fact that children with inattention benefit significantly from an orderly environment, which involves making physical adjustments and revising classroom schedules (Yehle & Wambold, 1998). Barkley (1998) emphasized that instructors need to keep their teaching tasks interesting by using various presentation formats to increase and maintain pupils with ADHD's interest, especially by incorporating multiple colors, large print, and bold lettering. Academic tasks for children with short attention spans should be brief and followed by immediate feedback, especially in assignments.

Also, using intelligent, well-behaved, and attentive peers during instruction is another key strategy when educators are attempting to modify the teaching environment for children with ADHD. Peers can be utilized as tutors or as tools for monitoring and rewarding desirable social and academic behaviors in children with ADHD (Barkley, 1999). The result is also supported by DuPaul et al. (1998), who found that class-wide peer tutoring increased academic engagement and decreased off-task behavior for most participants, with 50% of children with ADHD showing improvements in math and spelling. The findings are also supported by a recent study by Harrison et al. (2019), who found that classroom-based interventions for students with ADHD were moderately effective.

Findings from the second research question indicated that implementing behavior management strategies for ADHD learners in inclusive classrooms can be crucial, confirming Albert Bandura's (2007) social learning theory, which emphasizes that learning plays a significant role in shaping classroom behaviors. Children readily imitate observed behaviors. Teachers in inclusive settings need to equip children with ADHD in their care with "self-efficacy" skills, enabling them to exert control over their situation. Teachers will need to serve as good models; they should focus on the behaviors they want to modify in children rather than solely correcting them. Dupaul and Weyandt (2006) assert that strong support for behavioral interventions can reduce disruptive and off-task behaviors. Furthermore, Brock (2002) emphasized that a token economy is another behavioral intervention that can help learners manage classroom behavior problems. Token systems have been shown to be effective in improving both academic and behavioral performance in children with ADHD. Teachers can better design token programs for individual pupils or the whole class by selecting the tokens or credits to use, identifying the desired behaviors and the cost of the exhibited behaviors, and distributing tokens daily or weekly. Teachers and students need to decide on the type of rewards or activities that the tokens can be exchanged for. Therefore, if instructors in inclusive

classrooms can put all these strategies in place, the researcher believes that they can better manage the behaviors of children with ADHD in their classrooms and bring out the best in them, especially those with hyperactive/ impulsive subtypes.

Moreover, the findings from the third research question indicated that a combined classroom-based intervention was perceived as the most effective classroom-based accommodation strategy for supporting students with ADHD, compared with the other two intervention approaches. These findings are well supported by the Multimodal Treatment of ADHD study (1999), which highlighted the extensive nature of combined treatment approaches. The study also reported that a combined intervention resulted in significant reductions in ADHD symptoms. Swanson et al. (2001) also support this intervention approach, reporting a 68% success rate in the combined group, compared with significantly lower rates in other intervention groups. Furthermore, Brock (2002) argues that no single classroom intervention will effectively improve the classroom functioning of all learners with ADHD. Simultaneously adjusting the classroom environment and employing behavior management techniques are more effective than using a single intervention with a child with ADHD (DuPaul & Stoner, 2014; Fabiano et al., 2009). The combined intervention strategy may also involve implementing peer tutoring alongside a token economy in the classroom (Cook et al., 2015; Simonsen et al., 2010). Alternatively, it could include time-out periods and consistent monitoring of the child's progress (Kauffman, 2005). This approach may also entail positioning the child in close proximity to the teacher, who can use tangible rewards to encourage the demonstration of appropriate behaviors when applicable (Reid, 2004). These are all classroom-based intervention approaches that teachers working with children with ADHD in inclusive classrooms can use to accommodate learners with ADHD (Zablotsky et al., 2013).

Therefore, teachers need to compile a list of suitable items to use and make appropriate changes if some are not helping the child adjust in class (Barkley,

1999). The National Resource Center on ADHD (2016) emphasizes that these accommodations involve modifying the learning environment or structures to provide the support students need to engage effectively with the curriculum. Their effectiveness increases when they are tailored to meet the individual needs of students, taking into account the severity of their ADHD symptoms and any co-occurring conditions (National Resource Center on ADHD, 2016).

### **LIMITATION AND FURTHER RESEARCH**

The most significant limitation of this research was the difficulty of screening, observing, and implementing interventions within the available time frame. I believe that with additional time, the study's results could have been more impactful. Moreover, delivering interventions to three distinct groups of children with ADHD was difficult, tedious, and time-consuming, as many teachers were reluctant to dedicate the time needed to implement these strategies. This reluctance significantly influenced the study's outcomes. Additionally, some teachers with ADHD students in their classrooms were initially unwilling to collaborate with the researcher, and it required substantial explanation from the head teachers to help them recognize the importance of this study.

Despite these limitations, the study offers potential for future research in the African educational context, which could significantly enhance our understanding of ADHD in inclusive classroom settings. Therefore, expanding the investigation to other inclusive primary schools across Cameroon's regions could yield more valuable insights into the effectiveness of classroom behavioral management strategies. Additionally, conducting similar research in secondary schools to examine how these strategies affect students with ADHD's social skills

development would be beneficial. Furthermore, a quasi-experimental design with pre- and post-test group findings could provide stronger evidence than the survey approach used in this study. Moreover, examining the effects of stimulant medications on classroom behavior in children with ADHD, as well as exploring transitional services specifically designed for young girls with ADHD in secondary schools.

### **CONCLUSION**

Addressing the challenges posed by students with ADHD in inclusive classroom settings requires a proactive, informed approach from educators. Teachers play a crucial role in recognizing early signs of ADHD and implementing effective classroom-based intervention. The study contributes to the growing body of evidence-based classroom support for students with ADHD or at risk of ADHD, highlighting the importance of tailored support that accommodates the diverse needs of this group of learners. The findings provide actionable strategies for educators and underscore the importance of using standardized resources, including the American Psychiatric Association's DSM-5, to accurately screen students at risk of ADHD. The findings also underscore the need to leverage environmental adjustments, behavior management strategies, or a combination of both, to address the individual differences among learners with ADHD. Teachers can create a classroom environment that fosters both academic success and improved social skills. Future research may replicate this study in secondary schools to examine how these strategies affect the development of academic and social skills among high school students with ADHD.

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