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**Investigating Teachers' Preparedness and Challenges
in Supporting ADHD Children in Primary Schools:
Case Study of Primary Schools in Beni Saf, Ain
Temouchent.**

*A Dissertation Submitted in Partial Fulfillment of the Requirement for a
Master's Degree in Didactics and Applied Languages*

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Dedications

In the name of Allah, the most Compassionate, the most Merciful

To my beloved parents

Dear Mom and Dad

Whose endless love, unwavering sacrifices, and constant encouragement have shaped every step of my journey. Your belief in me, even during the most difficult times, has given me strength, courage, and the will to keep going.

To my dearest grandmother,

whose wisdom, warmth, and heartfelt prayers have been a continuous source of comfort and light in my life. Your gentle words, kind spirit, and unshakable faith have inspired me more than you will ever know. You hold a special place in my heart that no one else can ever fill.

To my cherished family members,

each of you who stood beside me with your kind words, supportive gestures, and unconditional love. Your presence, whether near or far, has made a difference in this journey.

Thank you for cheering me on, lifting me up, and reminding me of the strength that comes from unity and shared dreams.

This work is dedicated to you all.

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Abstract

Attention-Deficit Hyperactivity Disorder (ADHD) is one of the most widespread childhood neurodevelopmental disorders, often leading to challenges in academic performance, social interactions, and classroom behaviors. In Algerian primary schools, children with ADHD may have difficulties maintaining focus, following instructions, and regulating impulses, which can disrupt their learning environment. Teachers play a vital role in addressing the unique needs of ADHD children. Yet, many face significant challenges in adapting their teaching methods and classroom management techniques to support these children effectively. This study aims to investigate teachers' preparedness and the challenges they encounter when supporting children with ADHD in primary schools. It focuses on schools in Beni Saf, Ain Temouchent, as a case study. To achieve these objectives, the study uses a qualitative research method, including three instruments: teachers' interviews, a clinical psychologist's interview, and classroom observations. The analysis of these study instruments highlighted a clear need for specialized teacher training in ADHD awareness and effective classroom strategies to support children with ADHD in their learning and ensure they have access to quality education.

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List of Acronyms

Attention-Deficit/Hyperactivity Disorder

(ADHD) 1

Disease Control and Prevention

(CDC)..... 15

Electroencephalograms

(EEGs) 11

The American Psychiatric Association

(APA) 12

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition

(DSM-5) 6

The National Institute of Mental Health

(NIMH) 7

The prefrontal cortex

(PFC) 9

The United States

(US) 7

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General Introduction

General Introduction

Childhood is a crucial phase that shapes a child's development, establishing the foundation for their physical, emotional, cognitive, and social growth. During these early years, children begin to comprehend the world, form relationships, and cultivate essential life skills. A supportive and inclusive educational environment is vital in this process, enabling children to reach their full potential. However, not all children experience this stage equally. Some may encounter developmental or learning difficulties that necessitate special attention and support. One such condition is Attention-Deficit/Hyperactivity Disorder (ADHD).

Promoting equal opportunities for all children is fundamental to creating a fair and supportive learning environment. Children with Attention Deficit/Hyperactivity Disorder often face unique challenges in the classroom. These challenges include difficulties in maintaining attention, following instructions, and regulating behavior, which can impact their academic performance and learning experience.

Teachers, as primary facilitators of the learning environment, play a crucial role in addressing the needs of these children. They are often the first to observe the difficulties that children with ADHD experience in the classroom, including challenges with focus, self-regulation, and following classroom routines. Nevertheless, many teachers report feeling unprepared and face challenges in supporting these children effectively. This gap in teachers' preparedness can make it difficult to provide the right support for children with ADHD and which can impact both the children's academic progress and the overall classroom environment. Therefore, teachers need to be well-prepared and to understand the nature of this disorder to ensure that children with ADHD get the support they need to succeed in a positive learning setting.

This research investigates teachers' preparedness and challenges in supporting children with ADHD in primary schools in Beni Saf, Ain Temouchent. The main goal of this study is to

offer a comprehensive understanding of teachers' preparedness and their experiences in identifying and supporting children with ADHD in primary schools. In addition, to uncover the specific challenges teachers face in managing ADHD behaviors, as well as the strategies they use to help children with ADHD in primary schools. Finally, to provide actionable recommendations to enhance teaching practices and support systems for teachers working with ADHD children. Therefore, the present research work attempts to find answers to the following questions:

1. In what ways does teachers' preparedness shape the nature of the support provided to children with ADHD in primary schools?
2. What are teachers' lived experiences in supporting children with ADHD, and how do these experiences influence their teaching practices?

The research methodology employs qualitative methods to collect, describe, and analyze data gathered through three research tools: teachers' interviews, a clinical psychologist's interview, and classroom observations. A sample of the population consisting of eight primary teachers and one clinical psychologist was selected for this study.

This work was divided into three chapters:

The first chapter focused on the theoretical background of ADHD. It outlined the history of ADHD, discussed its impact on the brain, defined its core characteristics, and reviewed various available treatment options. It also examined ADHD in educational settings, highlighting the critical role that teachers play in identifying children with ADHD and managing their behaviors. Furthermore, this part presented strategies suggested by other researchers that could help teachers effectively support and manage ADHD children in the classroom.

The second chapter of the study is devoted to the methodology. It describes the research design, the tools used for data collection, and the procedures followed during the fieldwork.

The third chapter focuses on the analysis and interpretation of the data collected and discusses its main findings. Finally, this section ends with a set of recommendations suggested to improve teachers' practices working with ADHD children.

Chapter One:

**Understanding ADHD and
Its Impact on Educational
Settings**

Chapter One: Understanding ADHD and Its Impact on Educational Settings

1.1 Introduction

The education of children with special needs has increasingly become a central concern in academic discussions, as highlighted by UNESCO's emphasis on the importance of inclusive education, stressing that all learners, regardless of ability, should receive equal educational opportunities (UNESCO, 2020). These children frequently need personalized support to address various learning and behavioral challenges that hinder their educational and social development. Among the most extensively studied and prevalent conditions within this group is Attention-Deficit/Hyperactivity Disorder (ADHD), which is marked by behaviors that present serious challenges for them, particularly regarding academic performance.

This chapter examines literature pertinent to the current study's focus. It begins with an overview of ADHD and its effects on the brain, followed by a discussion of its primary characteristics. Next, the chapter explores the various treatment options for ADHD. Additionally, the chapter focuses on ADHD in educational settings, emphasizing how the disorder affects children's academic performance, classroom dynamics, and teachers' perceptions. It also explores the essential role teachers play in identifying children with ADHD and the unique challenges they encounter in managing ADHD behaviors. Finally, the chapter includes strategies suggested by previous literature about supporting ADHD learners' needs.

1.2 The Historical Evolution and Diagnostic Development of ADHD

The understanding of Attention-Deficit Hyperactivity Disorder has evolved significantly over the past century. In the 1870s, the terms (Hyperkinesis) or (Hyperkinetic Syndrome) were used to describe what is now known as ADHD (Schworm, 1982). This earlier term primarily derived from the Greek words "hyper" (over) and "kinesis" (movement) that

emphasizes the overt behavioral symptoms observed in affected children. Historically, this disorder was also identified by various other names, including *Minimal Brain Damage*, *Psycho-Neurological Integration Deficit*, and *Hyperactive Child Syndrome* (Kaplan & Sadock, 1995). These early terminologies reflected a prevailing belief that visible hyperactive behavior was directly associated with brain damage. However, with the progression of research over time, ADHD is now viewed as a nuanced and complex neurodevelopmental disorder influenced by genetic, neurobiological, and environmental factors. Today, the publication of the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) marks a pivotal moment in refining the criteria for diagnosing ADHD (American Psychiatric Association, 2013). Unlike earlier definitions that tended to emphasize overt behavioral symptoms, the DSM-5 criteria recognize the disorder's complexity by differentiating between three presentations: predominantly inattentive, predominantly hyperactive-impulsive, and combined. These nuanced classifications allow clinicians to tailor interventions and support strategies more effectively depending on individual presentations.

1.3 The Definition of Attention Deficit Hyperactivity Disorder

ADHD has been widely studied, with researchers offering diverse perspectives on its definition:

According to Barkley (1998), ADHD is characterized by three primary features: inattention, impulsivity, and hyperactivity. Inattention is shown by seeming distracted or struggling to complete tasks, with children often becoming easily diverted by external stimuli or their thoughts (Kendall, 2000). Impulsivity, which is characterized by acting on emotions without thinking (Kewley, 2005), may lead to frequent interruptions in class or engagement in risky behaviors due to an inability to pause or evaluate actions. Hyperactivity is described as excessive physical or vocal activity, which may not be suitable for the child's development level (Barkley, 1998), and frequently results in challenges within structured environments like

classrooms. Together, these core symptoms contribute to the severe social and academic challenges that children with ADHD commonly experience.

Recent literature emphasizes that ADHD is a multifaceted neurodevelopmental disorder extending beyond the traditional focus on hyperactivity and inattention. Brown (2006) conceptualized ADHD as a complex disorder characterized by impairments in executive functions. In a simplified manner, the individual will have difficulty with the mental skills needed to manage and control their behavior. This broad perspective positions ADHD as a disorder of self-regulation that affects multiple cognitive and behavioral domains. This wider view is supported by Biederman and Faraone (2006), who note the pervasive nature of ADHD related impairments and observe that individuals with the disorder often experience significant functional challenges across both academic and social contexts. Furthermore, they point out that ADHD frequently co-occurs with various externalizing disorders, such as oppositional defiant disorder, as well as internalizing disorders such as anxiety and depression, which compound its impact on educational outcomes and interpersonal relationships.

ADHD is a widely recognized neurodevelopmental disorder that varies in prevalence across populations. The Britannica Dictionary (2017) reports that ADHD is more commonly diagnosed in males than females, affecting between 3% and 6% of children. However, other Statistics in different articles (Beckle, 2004; Frank-Briggs, 2011; Schnoes et al., 2006; Wright, 2006) provide general prevalence rates that range from 3% to 9%, without distinguishing between genders. Moreover, while its symptoms are widespread globally, the United States (US) is considered the country with the most children diagnosed with ADHD. In addition, according to the National Institute of Mental Health (NIMH), the median age of ADHD diagnosis varies by severity, with severe cases typically identified at a median age of 4 years, moderate cases at 6 years, and mild cases at 7 years. This indicates that children who show more noticeable and disruptive symptom are recognized earlier. This early identification can be

enhanced by timely interventions and support, which may lead to more favorable long-term outcomes.

Importantly, while many researchers point out that ADHD disorder leads to academic underachievement, Adiputra (2019) highlights that not all ADHD learners are academic failures; there are also ADHD learners who are geniuses and possess unique creative capacities. This viewpoint emphasizes that although ADHD may create difficulties in traditional educational settings, it does not reflect a lack of intellectual ability. In fact, many learners with ADHD have unique strengths, and with the right support and accommodations, they can thrive and achieve remarkable success.

1.4 Attention Deficit/Hyperactivity Disorder and the Brain

The first step in understanding human behavior is recognizing that the brain is a highly complex organ that governs every aspect of our lives. The human brain has approximately 86 billion neurons, or nerve cells, forming thousands of connections (Azevedo et al., 2009). These linkages create an extensive network, ranging from basic abilities like sight and hearing to more complex functions such as thinking and decision-making. Different brain regions serve distinct purposes; for example, the temporal lobes assist in hearing and memory, while the occipital lobe is responsible for vision. The brain is also incredibly flexible, a feature known as neuroplasticity. This means it can adapt and create new connections based on our experiences, learning, or even injury. This ability is crucial for acquiring new skills, gradually improving our behavior, and healing from damage. As Gazzaniga et al. (2018) note in their book, the brain is a complex organ that controls nearly every aspect of human behavior, including attention, cognition, and emotional regulation. Understanding these relationships aids in grasping each brain disorder. This concept illustrates that different regions of the brain collaborate to perform essential tasks that enable us to interact with and comprehend the world around us.

Over the years, research has increasingly focused on understanding the neurological foundations of ADHD to explain the behavioral patterns associated with the disorder. In the following sections, we will explore two key aspects of this neurological basis: key insights into ADHD mechanisms and brain wave patterns observed in individuals with ADHD. Both of which help clarify how neurological differences contribute to the symptoms and challenges faced by those with the disorder:

1.4.1 Key Insights into ADHD Mechanisms

Neuropsychological studies have highlighted that individuals with ADHD may process information differently. These insights have contributed to a deeper understanding of how ADHD affects daily functioning and behavior. One major finding is that the difference in brain structure and activity, particularly in the prefrontal cortex (PFC)—a brain region located just behind the forehead that plays a key role in focusing attention, controlling impulses, and managing behavior—is closely linked to the self-control issues seen in ADHD. Arnsten (2006) in her research discusses how individuals with ADHD often show structural and functional differences in the brain, particularly the prefrontal cortex. Likewise, Cao et al. (2006) found that in healthy brains, there is a high degree of connectivity between the prefrontal cortex and other brain regions. While in ADHD brains, this connectivity is often weaker, which makes it harder for individuals to regulate focus and behavior effectively, which in turn leads to challenges in organizing thoughts and managing behaviors.

In addition to these differences, researchers also point out that individual with ADHD shows a decreased size of the cerebellar vermis, a region crucial for motor coordination and emotional control. This discrepancy may contribute to inattention and impulsivity often observed in those with the disorder. In addition, a reduction in volume within the frontal and parietal cortices has been linked to challenges in attention management and cognitive

adaptability, which further complicates both academic and social performance for those affected (Makris et al., 2007; Valera et al., 2007).

Collectively, these findings show that Attention-Deficit Hyperactivity Disorder is not tied to a single brain area. Instead, it is strongly connected to structural and functional differences in the prefrontal cortex. Such neurological differences play a key role in the self-regulation difficulties commonly observed in individuals with ADHD. Furthermore, ADHD involves widespread neurodevelopmental variations that extend beyond the prefrontal cortex, influencing multiple aspects of functioning, including cognitive flexibility, emotional regulation, and behavioral control. This broader neurological profile helps explain the complexity and diversity of symptoms experienced by children with ADHD across different environments.

ADHD

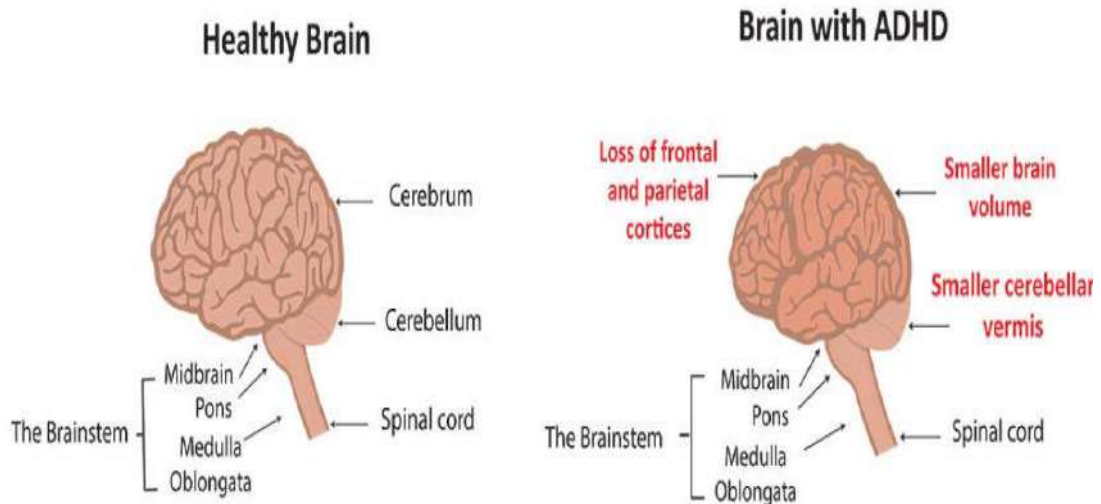


Figure 1: Healthy Brain vs. Brain with ADHD. Adapted from (*ADHD and School: ADHD Brain*, by Boss, 2015).

1.4.2 Brain Waves Patterns in ADHD

The human brain produces a variety of electrical signals, commonly referred to as brain waves, which can vary in speed and indicate different mental states. Two types of brain waves, known as theta waves and beta waves.

Studies using electroencephalograms (EEGs) have shown that individuals with ADHD exhibit distinct brain wave patterns compared to those without the disorder. Specifically, theta waves, which are slow brain waves, are often found at higher levels in the frontal and central regions of the brain in people with ADHD. This increase in theta waves is associated with difficulties in attention and cognitive functioning (Barry et al., 2003; Loo & Barkley, 2005). On the other hand, beta waves, which are faster brain waves, tend to be lower in individuals with ADHD, and this reduction has been linked to symptoms of impulsivity and hyperactivity (Barry et al., 2003; Loo & Barkley, 2005). This imbalance leads to a higher theta/beta ratio (TBR), which may indicate a brain that is less prepared for tasks requiring sustained attention and self-control. The neurological basis for this pattern may involve delayed brain maturation, dopamine dysregulation, and impaired neural connectivity, especially in frontal brain circuits (Barry et al., 2003; Loo & Barkley, 2005). This helps explain why a person with ADHD may often struggle to concentrate, act impulsively, or appear overactive, as their brain activity reflects reduced ability to regulate focus and behavior effectively.

All in all, while a healthy brain has a mix of balanced brain waves that help maintain focus and self-control, an ADHD brain often shows an overproduction of slow theta waves and reduced fast beta waves. This imbalance, especially in the front and center areas of the brain, leads to problems with attention, impulse control, and staying on task.

1.5 Attention Deficit/Hyperactivity Disorder Characteristics

Attention Deficit/Hyperactivity Disorder (ADHD) is a common neurodevelopmental condition that substantially impacts daily functioning and overall quality of life, making it a critical topic in both medical and educational settings. According to the American Psychiatric Association (APA, 2013), ADHD is defined by ongoing patterns of inattention, hyperactivity, or impulsivity that interfere with normal functioning. Specifically, the APA notes that symptoms such as difficulty focusing, excessive movement, and impulsive actions must persist for at least six months and result in significant impairment across settings like home and school. These symptoms are explained by the APA as follows:

1.5.1 Inattention

Including at least six of the following symptoms:

- Trouble staying focused for a long time, like being unable to finish a homework assignment without getting distracted.
- Not finishing tasks as expected, such as forgetting to follow all steps in a task.
- Avoiding tasks that require thinking hard, like math.
- Getting distracted by things happening around them, like paying attention to a noise in the room instead of focusing on the lesson.
- Frequently losing important things, like forgetting a notebook.
- Not paying attention when someone gives instructions, like when a teacher tells them what to do, but they don't follow them.
- Making simple mistakes because they didn't check their work, like not noticing errors in writing.
- Struggling to plan or keep track of tasks, like not knowing how to start a task or forgetting to do steps in order.

1.5.2 Hyperactivity/Impulsivity

Including at least six of the following symptoms:

- Moving or shaking hands or legs, the child may shake their leg rapidly or tap their fingers during class.
- Having trouble staying seated when it is expected or required, like in a classroom. They might get up or walk around, even when they are supposed to stay seated, causing disruption.
- Running or climbing when it is not the right time or place.
- Being overly active, like moving around too much.
- Having trouble doing calm activities like reading or drawing.
- Getting frustrated or impatient while waiting for their turn in games or group activities, an ADHD child might get upset and act out because they have to wait for their turn, showing impatience.
- Interrupting or bothering others when they're talking or doing something, they might blur out answers in class or start talking when someone else is speaking, disrupting the flow of conversation or activity.

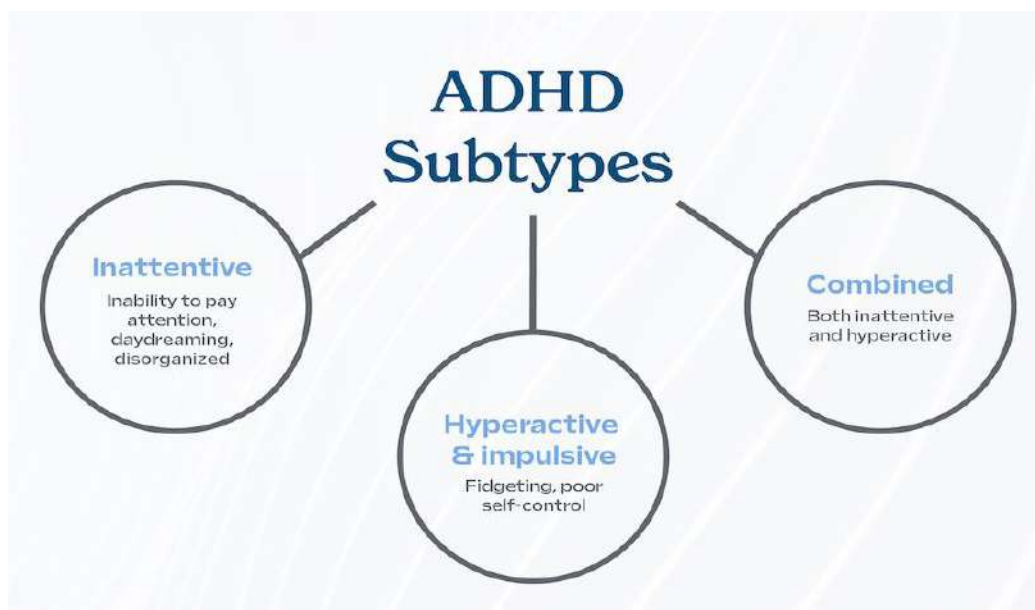


Figure 2: ADHD Subtypes. Adapted from (ADHD Subtypes: Inattentive, Hyperactive-Impulsive & Combined, by TNNFB, 2023).

1.6 Treatment for ADHD

Treating ADHD in children usually involves a multi-faceted approach designed to address the complex range of symptoms. Typically, effective treatments often include a combination of medication, behavioral therapy, parent training, and educational support.

1.6.1 Medication

In cases of severe ADHD, medication is often considered an essential part of treatment, particularly when other strategies are insufficient. Research by Said et al. (2015) shows that stimulant medications are typically the first line of treatment, as they have a strong track record of quickly improving attention and reducing hyperactive behavior. The American Psychiatric Association (2017) supports this view by noting that stimulants, including methylphenidate and amphetamine, are popular choices due to their quick-acting effects and a decades-long history of safe use. These medications enhance the levels of neurotransmitters, most notably dopamine, which play a key role in managing motivation, regulating behavior, and emotional regulation. An increase in dopamine levels helps reduce symptoms like inattention and hyperactivity. However, since each child responds differently to medication, finding the right dosage is often a gradual process that requires careful monitoring and adjustment over time. Children on stimulant medications should follow their doctor's prescribed plan and have regular check-ups to adjust dosages and ensure that the treatment plan remains effective over time.

In addition to stimulants, non-stimulant medications like atomoxetine and clonidine are available and may be used when stimulants are unsuitable or cause unwanted side effects (Pedraza & Newcorn, 2015), though they tend to have a slower onset of action and may be less effective for some patients.

1.6.2 Behavioral Therapy

Pelham & Fabiano (2008) note that behavioral therapy is widely recognized as one of the most effective non-pharmacological interventions (treatments or strategies used to help manage a condition like ADHD without using medicine). This approach employs a variety of structured techniques to modify behavior. It is based on the principle that behaviors can be shaped through systematic reinforcement. For instance, a standard method is the token reward system, where children earn tokens or rewards for exhibiting positive behaviors. In addition, techniques such as time-outs provide a brief pause that helps children learn to control and manage impulsive actions (Barkley, 2020)

The overall goal of these strategies is to reinforce desirable behaviors and reduce undesirable ones by using structured interventions. Research indicates that such interventions can lead to improved self-control and social interactions, and overall behavior both in the home and in school settings, ultimately supporting their academic success (DuPaul & Stoner, 2014).

1.6.3 Parents Training

Parent training is a vital element of a comprehensive ADHD management strategy; it helps parents learn how to manage their child's ADHD behaviors effectively through a variety of structured interventions. According to the Centers for Disease Control and Prevention (CDC, 2022), parent training helps parents develop the skills needed to support and manage their child's behavior effectively (CDC, 2022). The training focuses on methods such as positive reinforcement, rewarding desired behaviors, and establishing clear, consistent rules and routines. These strategies help reduce impulsivity and create a stable daily structure, which is particularly beneficial for ADHD children. Additionally, parents should also work closely with teachers to understand how their child learns best and ensure that behavioral strategies are applied consistently at home and in the classroom. A study published in *Frontiers in Psychology* found that a combined parent-teacher training program, which included behavioral

interventions for parents and classroom management skills for teachers, led to notable improvements in children's ADHD symptoms and academic outcomes, as well as reduced parental stress (Snyder, Luebbe, & Pina, 2021).

1.6.4 Educational Supports

In the educational setting, teachers are often the first to notice signs of ADHD in children in the classroom. Their everyday interactions with learners provide a unique opportunity to observe subtle differences in symptoms such as attention, impulse control, and hyperactivity that might otherwise go undetected. These early observations may frequently lead to comprehensive assessments (DuPaul & Stoner, 2014), which are necessary to make a correct diagnosis. Once a diagnosis is made, teachers play an instrumental role in fostering a supportive educational environment (Sherman et al., 2008). They help children with ADHD build self-confidence, create a comfortable learning atmosphere, and develop the skills necessary for academic and social success. This support is achieved through ongoing communication with parents, asking thoughtful questions, providing a clear picture of the child's strengths and challenges, and understanding each child's unique learning style. Through these coordinated efforts, teachers help mitigate the academic and social difficulties associated with ADHD.

1.7 The Influence of ADHD in Educational Settings

Attention Deficit/Hyperactivity Disorder (ADHD) is one of the most common conditions that affects children's ability to learn, particularly in school settings. Challenges in the ability to concentrate, follow directions, and manage their impulses often affect their academic performance, classroom behavior, and social development, making school a particularly challenging environment for them.

This part explores the multifaceted influence of ADHD on children's performance in educational settings, including their academic performance, social interactions, and relationships with both peers and teachers.

1.7.1 ADHD and Children's Academic Achievement

For teachers, it is necessary that they know how ADHD impacts learning, as it emphasizes the need for focused interventions and a support system. In an educational setting, learners are expected to show self-regulatory skills, such as planning, controlling, coordinating, and evaluating their actions. These skills are essential for them to meet the expectations of following rules, engaging in appropriate interactions with both teachers and classmates, and actively participating in the teaching and learning process. For learners with ADHD, however, these expectations can be particularly challenging due to their struggles with attention, impulse control, and executive function deficits.

ADHD is widely recognized among the most prevalent neurodevelopmental disorder seen in school-aged children. Bolinger et al. (2020) report that around 3 to 5% of children across the globe are affected by ADHD, meaning there is likely at least one child with ADHD in every classroom of 20 to 30 children. This indicates that ADHD is a prevalent condition worldwide, impacting a significant portion of the learners' population.

In addition to its high prevalence, ADHD is strongly associated with academic difficulties, especially in literacy skills, which lead to lower overall academic performance. Studies show that approximately 80% of learners with Attention-Deficit Hyperactivity Disorder (ADHD) experience difficulties in reading, spelling, and writing, which frequently contributes to poor academic performance. (Lawrence, 2012).

Oftentimes, according to the CDC (2022), children with ADHD may find it difficult to engage productively with their schoolwork, which highlights that ADHD can make it hard for children to stay focused and engage with their schoolwork. These challenges often result in incomplete assignments, lower test scores, and an overall decline in academic performance compared to their peers. This low academic achievement may also stem from the lower levels of motivation experienced by learners with ADHD (Martin, Collie, & Burns, 2017). This means

that learners with ADHD may face challenges staying motivated in the classroom, directly affecting their engagement level.

Moreover, ADHD with behaviors such as impulsivity and hyperactivity can further hinder academic progress. Hinshaw (2002) argues that ADHD learners may display impulsivity or hyperactivity that prevents them from focusing on academic tasks. They may frequently lose focus, get distracted, or act without thinking. A child with impulsivity may interrupt the class by speaking without permission or engaging in conversations at inappropriate moments. Similarly, a hyperactive child may struggle to remain seated for extended periods. These behaviors can interfere with classroom participation and disrupt learning for both the individual and their peers.

1.7.2 Social Dynamics: The Relationship Between ADHD Children and Their Peers

Children with ADHD often experience significant challenges in their social interactions, which can impact their relationships with peers. Due to difficulties with symptoms such as impulse control, attention regulation, and social awareness, they are frequently perceived in a negative light by their classmates.

For instance, in a study by Law et al. (2007), 11-12-year-old children were asked to read vignettes about a child exhibiting ADHD behaviors and then choose adjectives that best describe the child. The four most commonly chosen adjectives were all negative: "careless," "lonely," "crazy," and "stupid." This negative perception often results in peer rejection, which can have profound effects on a child's emotional well-being and social development. Additionally, Hoza (2007) reports that nearly 50% of children with ADHD have been rejected by their peers. Such rejection not only contributes to feelings of isolation and low self-esteem but also impacts academic engagement, as ADHD children may struggle to participate in group activities and collaborative learning environments.

Moreover, Children with ADHD often exhibit lower sensitivity to their friends' needs and preferences, focusing on their interests and taking a dominant role in play (Normand et al., 2011). This tendency can make it difficult for them to form and sustain meaningful friendships since their friends may feel ignored or overshadowed.

1.7.3 Teachers' Attitude

Teacher attitude is the way educators perceive and respond to their learners, including their learning needs, behavior, and potential. It involves the beliefs and feelings teachers hold towards them. It is essential as they can significantly influence both the academic and social outcomes of learners.

In classrooms, some educators approach their children with confidence, as capable, motivated, and engaged with the course content. However, other educators may start with lower expectations and have little initial faith in their abilities. Thus, understanding teachers' ADHD-specific attitudes is crucial, as these attitudes play a direct role in shaping their intentions, which then affect their actions and interactions with their learners inside the classroom.

Teachers' attitudes toward learners can vary greatly from one teacher to another, and so can their teaching methods, influencing both classroom dynamics and learners' outcomes. Ehrman and Dornyei (1998) highlight that it is up to the teacher how to employ it, either positively or negatively (Cited in William & Mercer, & Ryan, p.37). This highlights that teachers have the choice of how to use their power in the classroom, whether positively or negatively. By showing empathy, understanding, and collaborating with other professionals, teachers can foster a positive, supportive and effective learning environment, especially for children with special educational needs (Sherman et al., 2008).

Furthermore, Teachers must approach each child with patience, creativity, and a clear understanding of their strengths and needs to effectively help learners with ADHD focus and succeed in the classroom. Teachers can help ADHD children stay on task and feel valued in the

learning process, and the way teachers perceive ADHD is influenced by their understanding and knowledge of the disorder, as they are more likely to use effective teaching strategies and methods, which is what explains a positive attitude.

However, negative teacher attitudes toward learners with ADHD can create a challenging learning environment that impacts their academic performance. It can lead to stigmatization where children with ADHD are isolated or excluded (Kanyagui, 2023). In this case, children may feel bad about themselves, lose confidence, and struggle to make friends. This, in turn, can impede their social development as they miss opportunities to practice and build essential social skills.

On the other hand, many teachers may see the symptoms of ADHD as simply behavioral issues. This misunderstanding leads to misconceptions that learners with ADHD lack discipline, are lazy, or are deliberately acting out. As a result, teachers may be less willing to provide accommodations or adapt teaching strategies, as well as affect their way of dealing with children with ADHD.

1.8 Role of Teachers in Identifying ADHD in the Classroom

Teachers play a crucial role in the education and development of all learners, particularly those who face unique learning challenges. As they interact with them daily, they are often the first to identify symptoms and behavioral patterns that may indicate learning difficulties, such as ADHD. Their role to offer tailored support is vital in ensuring that every learner has the necessary tools to succeed.

Primary school teachers, in particular, are uniquely positioned to detect early signs of ADHD due to their consistent contact with young children during formative educational years. As Tannock and Martinussen (2001) note, teachers are often among the first to notice behaviors and signs associated with ADHD children because of their familiarity with expected classroom behaviors that distinguish diagnosed children from their peers. Through teachers' daily

interactions, they notice when a child struggles to pay attention, has trouble following instructions, or acts impulsively more than others. These observations are valuable and play a role in providing the special needs that children with ADHD need by offering interventions, accommodations, and support to help them achieve their full academic potential.

Moreover, teachers play a crucial role in formally identifying children with ADHD by carefully documenting their behavior over time. For example, a teacher might notice that a child in the classroom gets up from his seat, interrupts classmates, and struggles to complete tasks on time in every session. To better understand the situation, the teacher should observe the child's behavior. By carefully monitoring these behaviors across different settings, teachers will provide essential input that aids in the accurate diagnosis of ADHD (DuPaul & Stoner, 2014).

In addition to identification, teachers can implement classroom strategies to support their learners. Teachers can provide a structured and supportive environment in which these children can manage their symptoms while remaining engaged in learning. According to Smith (2024), teachers can foster a supportive environment that supports ADHD children by setting clear boundaries, creating a culture of acceptance, and establishing an appropriate routine.

1.9 Challenges Faced by Teachers in Supporting ADHD Children

Teachers, much like professionals in other fields, face a multitude of challenges, including adjusting lessons to meet the needs of learners in large classes, motivating learning, and addressing their social and emotional needs, which can lead to disruptions that impact both the children' learning and the classroom environment.

In the framework of teaching children with ADHD, one of the challenges teachers face is that not all strategies work equally well for every learner. Teachers generally use a variety of strategies to accommodate the diverse learning needs of their learners. However, when working with ADHD children, they often cannot rely on general teaching methods that typically work

for most learners. For instance, they might apply other techniques or specialized strategies that cater specifically to their challenges.

According to Kirschner (2015), one of the primary challenges that teachers face in an inclusive classroom is to maintain order, adhere to the instructional structure, and ensure that all learners are safe. In the case of ADHD children, teachers face numerous challenges due to the difficulties associated with hyperactivity, impulsivity, and inattention. For example, a child with ADHD moves around the classroom, interrupts the teacher, or forgets to bring their homework. As a result, these behaviors lead to disruptions to learning, difficulty with classroom management, and teacher burnout and stress.

Moreover, many teachers lack specialized training on how to effectively support ADHD children. As ADHD is a complex neurodevelopmental disorder, without proper training, teachers may struggle to identify ADHD symptoms, leading to misconceptions and misinterpretations of behaviors and ineffective responses. Besides a lack of specialized training, lack of resources, where many educators do not have access to essential tools such as specialized materials and technology-assisted learning tools. Consequently, teachers may struggle to maintain classroom control, experience lower job satisfaction, and witness a decline in learners' performance.

1.10 Strategies for supporting ADHD children in the Classroom

Every day, the number of children with ADHD continues to increase globally, leading to growing challenges within educational settings. As key facilitators of learning, teachers need to deal with the learners in the best possible way (Siedentop et al., 2019). As Lee and Witruk (2016) point out, teachers should be well-prepared and committed to supporting learners with ADHD, rather than giving up on them. Highlighting the importance of professional preparedness to ensure that all learners have equal opportunities to succeed.

1.10.1 The Educators

Effective support for children with ADHD requires that teachers demonstrate specific personal qualities and employ targeted instructional strategies tailored to meet their unique learning needs. The teacher teaching ADHD children should be calm, patient, and supportive. As Green and Chee (1997) emphasize “the ideal teacher is firm, flexible, and knows when to back off” (p. 103), implying that a balance between consistency and adaptability is essential when addressing the fluctuating behavior and attention levels typical of learners with such a disorder.

Beyond personal qualities, teachers must cultivate practical techniques to build self-confidence and encourage learning among these learners (Zentall, 2005). Teachers who have a nuanced understanding of ADHD-specific learning styles can play a crucial role in shaping their development and self-image (Wigal et al., 2011).

Additionally, many studies support the idea of focusing on learners’ productivity. Barkley (2016), for example, supports this idea by suggesting that prioritizing productivity over accuracy can enhance the perseverance of ADHD learners. This indicates that teachers can help those children by shifting focus to productivity, like encouraging them to complete tasks, stay engaged, and put in effort, as well as teachers can help them build confidence and endurance.

Moreover, fostering a "can-do" attitude in ADHD children is essential. Teachers can emphasize effort, resilience, and small achievements by creating a supportive and understanding environment that values progress over perfection, which can enhance perseverance and self-belief in learners with ADHD.

1.10.2 The Lessons

Learners diagnosed with ADHD often struggle with disorganization, making it essential to teach them organizational skills. So in this case, the lessons should be as simple and clear as possible. Rosenshine (2012) highlights that effective teachers should provide clear, concise,

and step-by-step instructions to minimize confusion and enhance understanding. For instance, breaking down complex tasks into smaller ones and using visual aids like diagrams and color-coded schedules can support verbal instructions. Additionally, another common challenge for ADHD learners is maintaining focus during lessons. To address this, teachers should ensure that lessons are exciting by using a motivated way to teach, such as task-based games, learning using songs, and giving positive reinforcement to encourage them to do well (DuPaul & Stoner, 2014).

1.10.3 The Classroom

Creating a structured and calm classroom is essential for supporting children with ADHD. Ideally, teachers should place them in seats distant from noisy areas, such as doorways or windows (Ingersoll, 1998). To help them stay focused and minimize the chances of off-task behavior, children with ADHD should be seated in the front of the room, facing the teacher. They can also be positioned between two calm and focused peers to assist in setting an example of proper conduct and avoiding social distractions.

1.10.4 Collaboration with Parents

Collaboration between teachers and parents is widely recognized as a crucial component in supporting children with ADHD. It can create a consistent support system and help reinforce techniques that promote academic success (Green & Chee, 1997). Such cooperation fosters academic achievement by building a reliable support network that strengthens methods used in both the classroom and at home. In addition to aiding the child's academic progress, it assists children who often experience difficulties with inconsistency and transitions through regular communication, cooperative goal-setting, and fosters a more welcoming and compassionate learning environment.

1.10.5 Teacher Training

Many teachers report feeling inadequately prepared to support ADHD children due to limited training. Moreover, studies have been conducted to look at teachers' training needs to deal with ADHD learners (Young et al., 2020). Likewise, Jaiswal (2021) highlights that for inclusive education to be successful, teachers must receive professional development on ADHD to manage classroom challenges and provide appropriate support. In response to this gap, several studies have explored teachers' training needs, emphasizing the importance of equipping educators with the appropriate strategies to address the unique challenges posed by this disorder. Nevertheless, in the absence of formal training, many teachers usually use self-study techniques when working with kids who have ADHD. While these self-study techniques might provide some level of support, they frequently lack the methodical direction and the support required for successful intervention.

1.11 Conclusion

In summary, this chapter has provided an overview of the current literature on ADHD, beginning with its neurological underpinnings and core characteristics. It has presented the range of treatment options available. Next, the chapter highlighted the profound impact of ADHD within educational settings, shedding light on how the disorder influences children across various dimensions. Additionally, special attention was given to the pivotal role of teachers, the challenges they face, and various strategies suggested by previous literature to help them better support children with ADHD. These insights form a foundation for the present study, which seeks to further investigate teacher preparedness and challenges in supporting ADHD children within primary school contexts. The next chapter will outline the research methodology and data collection procedures used to investigate these issues within the primary school environment.

Chapter Two: Research Methodology and Data Collection

Chapter Two: Research Methodology and Data Collection

2.1 Introduction

Following the theoretical framework from the previous chapter, the present chapter discusses the methodology used in this research study, investigating teachers' preparedness and challenges in supporting ADHD children in Beni Safe, Ain Temouchent primary schools. This chapter aims to provide an understanding of the research process and to establish a connection between the theoretical and practical aspects of the study. It first discusses the research design and method, explaining the rationale behind the chosen approach. Next, it describes the investigation context and participant sample, highlighting the settings and the participants under study. Finally, it details the data collection tools and procedures, outlining their purpose and implementation in the study.

2.2 Aim of the Study

This study aims to investigate teachers' preparedness and challenges in supporting ADHD children in primary schools. It seeks to explore how well teachers are prepared to deal with ADHD-related behaviors by examining their experiences, attitudes, the challenges they encounter in the classroom, as well as strategies they employ to support these children.

2.3 Research Methodology

Research methodology outlines the systematic steps used to achieve a specific research objective, beginning with formulating research questions and hypotheses and concluding with presenting findings. Many researchers have variously defined research. Goddard and Melville (2004) defined research as follows: "research is not just a process of gathering information, as is sometimes suggested, rather, it is about answering the research questions or creating what which does not exist" (p. 01). Moreover, Saunders et al. (2019) explain methodology in research as the conceptual framework that guides the application of specific methods in a study. It

explains the procedures used to conduct the research and justifies the selection of particular approaches.

In this study, a qualitative method was employed to effectively address the research objectives. This approach was chosen due to its ability to provide detailed insights into participants' experiences, perceptions, challenges, and strategies for supporting ADHD children in primary schools.

2.3.1 Qualitative Method

Qualitative research is a method used to comprehend and elucidate social phenomena. It entails gathering and examining non-numerical data from sources like observations and interviews. According to Creswell (2013), qualitative data consists of non-numeric information gathered through interviews, observations, and the analysis of texts, which emphasizes understanding the meaning and experiences of participants within their natural context.

This research examines the level of preparedness among teachers and the challenges they encounter when supporting children with ADHD in primary school settings. Therefore, qualitative methods were used, drawing on classroom observations and interviews with teachers and a clinical psychologist for data collection.

Teacher interviews were conducted in four (04) different primary schools, with two (02) teachers from each school, resulting in a total number of eight (08) teachers' interviews. The teachers' interviews aimed to gain insight into teachers' experiences, preparedness, challenges, and strategies for supporting ADHD children in primary schools. In addition, classroom observations, conducted in six (06) different classrooms across four (04) primary schools (with one (01) to two (02) classrooms observed per school), aimed to provide a detailed analysis of teacher preparedness, children behavior, challenges encountered, and instructional strategies to support ADHD children.

To further enrich the data and provide professional insights, an interview was conducted with a clinical psychologist specializing in child development. This interview took place in person at the psychologist's office. The expert interview offered valuable perspectives on ADHD symptoms, classroom challenges, and evidence-based strategies for intervention and teacher support.

2.4 Research Sample and Population

Any research must rely on a sample population for its analysis. According to Creswell (2012), a sample refers to a subgroup of the target population that the researcher studies to make broader inferences about the whole population. Besides, population, defined by Neuman (2011) as a large group of people or cases that a researcher studies by selecting a smaller sample to apply the results to the whole group.

The current study was conducted in four (04) primary schools in Beni Saf, Ain Temouchent, focusing on preschool grade, first, and third-grade classes during the 2024/2025 academic year. The sample includes eight (08) teachers and one (01) clinical psychologist. This sample was selected to gather in-depth insights from educators working with children who may exhibit symptoms of ADHD. Moreover, the inclusion of a clinical psychologist in the sample was essential for offering professional insights into the behavioral, emotional, and cognitive aspects of ADHD, as well as strategies for effective classroom support. The study focuses on primary-grade children as these foundational learning stages play a crucial role in early intervention and ADHD support. Finally, the selection of the four (04) schools aimed to ensure diversity in school environments, teaching styles, and classroom management practices, which may influence how ADHD-related challenges are addressed.

2.5 Data Collection Tools

Gathering data plays a crucial role in research; additionally, selecting the right research tools is essential to ensure careful and accurate data collection. According to Oben (2021), a

research tool is a scientifically designed instrument used to collect, measure, and analyze data related to research interests and objectives. Research tools should be chosen based on particular objectives, context, and data requirements.

In this research, a qualitative approach was adopted, using three tools of data collection methods. Teachers from different grade levels were interviewed to gather insights into their experiences, level of preparedness, strategies they use, and the challenges they face while teaching ADHD children in primary schools. Additionally, a psychologist interview was conducted to gather a deeper understanding of the disorder, its symptoms, classroom behaviors, teachers' challenges, and the strategies to support ADHD children. Meanwhile, classroom observations allow the analysis of teachers' actual classroom practices and interactions with ADHD children, as well as their behaviors during the classroom session, helping to confirm the responses provided during the interviews.

2.5.1 Teachers' Interview

In order to collect data about the teachers' perceptions, experiences, and challenges in teaching ADHD children, interviews were conducted with the teachers as a primary data collection method in this study. Interviews are useful for getting firsthand information from people about their opinions, beliefs, and feelings about a certain circumstance or incident. An interview is defined by Kothari (2004, p. 97) as a "presentation of oral-verbal stimuli and reply in terms of oral-verbal responses" (Kothari, 2004, p. 97). Researchers can gather information via interviews, which is not possible with observation alone. (Ary et al, 2010).

This study utilizes a semi-structured interview format. As noted by Taherdoost (2021), semi-structured interviews are centered around a set of predetermined questions within a formal framework, while also allowing room to delve into new topics that arise during discussions. Easwaramoorthy and Zarinpoush (2006) further explain that this method gives interviewers the ability to ask deeper questions based on participants' responses or seek clarifications through

follow-up inquiries. Such an approach is particularly effective for gathering comprehensive information from various participants, including educators and community leaders.

2.5.1.1 Description of Teachers' Interview

In this research, interviews were conducted as a primary data collection method. Hence, a total of eight (08) teachers participated in semi-structured interviews designed to explore their perception, preparedness, and the challenges they face in supporting ADHD children from four (04) different primary schools in Beni Safe, Ain Temouchent (Sidi Yakhlef Okacha 01, Sidi Yakhlef Okacha 02, Ibn Sina, Razi 01), with each school contributing two teacher interviews. The participants included four Arabic teachers (First Grade), two English teachers (Grade 3), and two preschool teachers.

The interviews were conducted before the classroom observations, each session lasting approximately between 25 to 30 minutes. During these face-to-face conversations, the interviews followed a semi-structured format, allowing for both consistency in questioning and flexibility in responses. The teachers were asked 11 open-ended questions that were prepared in advance to guide the discussion and ensure that key research themes were covered, focusing on their experiences, training programs, strategies, challenges, and perceptions regarding ADHD support in primary school settings.

2.5.1.2 Teachers' Interview Questions

Section 1: Identification and Experience with ADHD

Question 01: Do you currently have any children in your class who show signs or have been diagnosed with ADHD?

To evaluate teachers' practical experiences and familiarity with ADHD-related challenges, it is important to understand whether they currently work with children who have ADHD or display its behaviors.

Question 02: Can you identify a child with ADHD?

This question helps evaluate teachers' ability to recognize ADHD, which is crucial for appropriate classroom support and early intervention.

Question 03: What behaviors have you observed in children with ADHD in your classroom?

Teachers witness a wide range of behaviors in children with ADHD. Understanding these behaviors that teachers frequently face helps pinpoint important classroom management issues and ascertain whether educators are aware of ADHD-related characteristics.

Section 2: Training and Preparedness

Question 04: Have you received any training about ADHD in a teacher training or professional development program?

(Follow-up if yes: What type of training did you receive, and how helpful was it to you?)

The research can determine whether teachers have received formal training and how helpful they found it through this question. Additionally, it assists in identifying deficiencies in teacher education programs and the need for more organized training opportunities to enhance instructional strategies and classroom management.

Question 05: Do you feel that teachers in general are well prepared to support children with ADHD? Why or why not?

Teachers' preparedness is important for effectively supporting ADHD children. Understanding their viewpoints can help identify areas for improvement in professional development programs and school-wide support systems. This question helps determine whether educators feel confident in their ability to manage ADHD-related challenges or if they believe additional resources and training are needed.

Question 6: How do you think your level of preparedness impacts the academic performance and behavior of children with ADHD?

A teacher's confidence and preparedness have an important impact on their ability to support ADHD children. This question helps determine whether well-trained teachers see better academic outcomes and behavioral improvements in ADHD children than those who feel unprepared. It also emphasizes the importance of ongoing professional development in helping ADHD children succeed.

Section 3: Challenges Faced by Teachers

Question 07: What challenges do you face in supporting children with ADHD?

(Follow-up: How do these challenges impact your teaching and classroom environment?)

Teachers often face difficulties in the classroom when dealing with children with special needs. This question allows teachers to share their struggles, providing insight into the common barriers to effective ADHD support. Identifying these challenges allows for the development of targeted solutions to improve teaching practices

Question 08: Do you feel there is adequate support from the school (e.g., administration) in managing children with ADHD?

(Follow-up: What additional support would help?)

The response to this question will help to understand the level of administrative support, and it will indicate whether schools provide sufficient resources, training, and guidance for teachers to manage ADHD children in the classroom or still need additional support.

Section 4: Strategies and Support

Question 09: What strategies do you use to manage ADHD-related behaviors, such as inattention or hyperactivity?

(Follow-up: Can you give an example of using these strategies?)

Teachers create a variety of strategies to support children who need help. Asking this question helps uncover which methods are commonly used or if they struggle with behavior management in ADHD children.

Question 10: How do you modify your teaching style to help children with ADHD succeed?

Children with ADHD can benefit from improved learning experiences and engagement when teaching strategies are modified to meet their needs. The purpose of this question is to find out if teachers modify their teaching strategies to accommodate children with ADHD.

Question 11: What do you think could be done to better support children with ADHD in your classroom?

Teachers' firsthand experiences provide helpful recommendations for improving ADHD support in schools. This question invites educators to share ideas to better accommodate ADHD children. Their findings can inform future interventions for improving support for children with ADHD.

2.5.1.3 Sampling of Teachers

The following grid provides background information on the participating teachers involved in the study. It includes key details: the name of the school, grade level taught, subject taught, and years of teaching experience. This contextual data helps in understanding the diverse professional backgrounds and teaching environments of the participants.

Table 2-1 Teachers Sampling

Teachers	School	Grade Level	Subject Taught	Years of Experience
T1	Sidi Yakhlef Okacha (01)	PRESCHOOL GRADE	Early learning	10
T2	Ibn Sina	GRADE 1	ARABIC (and all the subject matters except English and French)	10
T3	Sidi Yakhlef Okacha (02)	PRESCHOOL GRADE	Early learning	8
T4	Razi (01)	GRADE 1	ARABIC	13
T5	Razi (01)	GRADE 3	ENGLISH	13
T6	Ibn Sina	GRADE 3	ENGLISH	12
T7	Sidi Yakhlef Okacha (02)	GRADE 1	ARABIC	8
T8	Sidi Yakhlef Okacha (01)	GRADE 1	ARABIC	7

2.5.2 Clinical Psychologist Interview

To complete the perspectives from the teachers' interviews, another interview was selected purposefully with a clinical psychologist to enrich the data. This professional perspective was included to provide a deeper understanding of the disorder that may not be fully captured through teacher interviews alone. The psychologist's expertise attempts to offer valuable insights into common ADHD symptoms, classroom-related challenges for both teachers and children with ADHD, and strategies for supporting affected children.

2.5.2.1 Description of Psychologists' Interview

A semi-structured interview was conducted with Mrs. Bendriss Amel, a clinical psychologist specializing in child psychology and developmental disorders, based in Ain Temouchent. The interview took place in her private consultation room office, a calm and professionally arranged setting that ensured a comfortable environment for open and focused discussion. The interview included six (06) open-ended questions to gather more helpful information about the disorder, focused on symptoms, challenges, and effective classroom strategies for supporting children with ADHD. The responses were originally provided in

Arabic and French and were translated into English for the purposes of analysis and reporting in this study.

2.5.2.2 The Psychologist's Interview Question

Question 01: What are the most common symptoms of Attention-Deficit Hyperactivity Disorder that you observe in school-age children?

The purpose of asking this question is to understand the key symptoms of ADHD as observed by a clinical psychologist in school-age children. This helps provide a clear picture of how the disorder typically presents in educational settings.

Question 02: What challenges do children with ADHD typically face in the classroom?

The purpose of asking this question is to gain a clearer understanding of how ADHD affects children's learning and behavior in school, helping to identify the main difficulties they experience so that better support strategies can be developed.

Question 03: What are teachers' main difficulties when working with ADHD?

Understanding teachers' main difficulties when working with ADHD child, helping to reveal gaps in classroom management and instructional strategies to enhance both teaching effectiveness and children outcomes.

Question 04: What strategies or techniques would you recommend for teachers to manage the behavior of these Children in the classroom?

This question aims to gather a clinical practical technique from the clinical perspective, handling common behavioral challenges associated with ADHD, ultimately helping both children and teachers succeed.

Question 05: Do you believe that special teacher training is needed to support children with ADHD? Why or why not?

The purpose of this question is to understand the expert's view on the significance of specialized teacher training for managing and teaching children with the disorder.

Question 06: Based on your experience, what advice would you give to a teacher who has just started teaching a child who faces such a disorder?

This question aims to collect advice that assists inexperienced teachers in managing and understanding the needs of children with ADHD.

2.5.3 Classroom Observation

Classroom observation is a valuable qualitative research method for directly observing the behavior of research participants in their natural learning environment. Observation is a scientific method that “serves a formulated research purpose, [it] is systematically planned and recorded, and it is subjected to checks and controls on validity and reliability” (Kothari, 2004, p. 96).

This classroom observation aims to gain a direct understanding of the behaviors of children with ADHD and how teachers address this condition in a mainstream classroom setting. Additionally, this method seeks to examine teachers' ability to accommodate ADHD children's learning needs and address their unique challenges.

2.5.3.1 Description of Classroom Observation

Classroom observations were conducted in the same four primary schools. A total of eight teachers were involved in the interviews, but only six teachers participated in the classroom observations: two teachers from English grade 3, two from Arabic grade 1, and two from preschool.

During each classroom observation, the researcher selected a non-participant observation to minimize bias and objectivity, allowing classroom interactions to unfold naturally. My role was to carefully document the classroom dynamics, the ADHD children's behavior, and the challenges teachers face when dealing with this disorder.

The researcher positioned at the back of the classroom to observe both the teacher and the pupils without interfering with the lesson. To ensure a structured and systematic approach,

the researcher utilized two main data collection tools: pre-designed grids to record key aspects and to collect all the essential information relevant to the aims of the study. Hence, each grid is divided into three main sections for clarity and focus. The first section includes general classroom observations, with contextual details about the four participating schools. The second section focuses on identifying ADHD-related behaviors. Finally, the third section highlights the challenges teachers face when supporting children with ADHD, along with the strategies they employ to manage these behaviors effectively. In addition, the second tool is a notebook used to take additional notes, allowing for detailed descriptions of specific interactions, behaviors, and unexpected occurrences that were not covered by the grid.

2.6 Conclusion

To conclude, this chapter has described the methodology and research design used in this study, emphasizing a qualitative approach to provide an understanding of the subject matter. Data collection involved the use of interviews alongside classroom observations. The next chapter will be entirely dedicated to analyzing the data and discussing the main results and the findings of this research.

**Chapter Three: Data
Analysis and Discussion of
the Results**

3.1 Introduction

The previous chapter explained the methods used in this study, including the research design, sampling, population, and data collection tools. This chapter analyzes and interprets the main findings from the collected data. The data consists of teachers' interviews, classroom observations, and an interview with a clinical psychologist. The results are organized and displayed using grids for clarity. The chapter also includes recommendations and possible implications based on the findings.

3.2 Research Findings

This part presents the analysis, interpretation, and reporting of the data collected in this study on teacher preparedness and the challenges faced in supporting children with ADHD in primary schools in Beni Saf, Ain Temouchent. The chapter is structured according to the three main qualitative research tools employed: teachers' interviews, a clinical psychologist's interview, and classroom observations.

3.2.1 Thematic Analysis of Teachers' Interviews Data

The interview primarily focuses on primary school teachers who work with children who show symptoms of ADHD in the classroom. Eight (08) teachers are interviewed from four primary schools. The interviews aim to gain insights into teachers' perceptions, challenges, and levels of preparedness in supporting ADHD children, as well as to examine the strategies they employ to meet these children's learning needs.

Question 01: Do you currently have any children in your class who show signs or have been diagnosed with ADHD?

Table 3-1 The Presence of Children Displaying Symptoms of ADHD in Teachers' Classrooms

Teachers	Original Responses	English Translation
Teacher 01	أتعامل معهم يوميًا. في هذه المرحلة، من الصعب تحديد ما إذا كان الطفل يعاني من اضطراب فرط الحركة وتشتت الانتباه، ولكن يمكنني القول أن معظم زملائي في المدارس الابتدائية لديهم خبرة في تعليم أطفال يعانون من أعراض هذا الاضطراب.	I work with them every day. At this stage, it can be challenging for me to determine if a child has ADHD; however, I can say that almost all my colleagues in primary schools have experience teaching children with this disorder symptoms.
Teacher 02	كل سنة، أجد في قسمي على الأقل 4 أطفال يظهرون سلوكيات توحى بأنهم يعانون من اضطراب فرط الحركة وتشتت الانتباه	Every year, I find at least 4 children who show behaviors of ADHD.
Teacher 03	نعم، في أقسامي وأيضًا مع ابني في البيت	Yes, in my classes and with my kid at home
Teacher 04	أدرس أطفالًا يشردون بخيالهم كثيرًا ويجدون صعوبة في الجلوس بثبات ويفقدون التركيز بسرعة. لا أعرف إذا كانوا يعانون من ADHD، لكن هذا النوع من السلوك ADHD يخلق تحديات لي ولهم أثناء التعليم	I teach children with behavior such as daydreaming and struggling to sit still, and losing focus quickly. I don't know if they have ADHD, but this kind of behavior creates challenges for both them and me while teaching
Teacher 05	I notice ADHD behaviors in nearly every class I teach	(Response given in English)
Teacher 06	I have more than 1 child who probably has ADHD.	(Response given in English)
Teacher 07	لا أعرف ما هو اضطراب فرط الحركة وتشتت الانتباه بشكل عام، ولكنني أدرس أطفالًا مفرطي النشاط، يتحدثون كثيرًا ويفقدون تركيزهم بسرعة	I don't know what ADHD is in general, but I teach overactive children who are talkative and lose focus.
Teacher 08	لا أعرف اضطراب فرط الحركة وتشتت الانتباه تحديدًا، ولكن في قسمي يوجد أطفال تظهر عليهم أعراض قريبة من هذا الاضطراب، مثل فرط النشاط	I don't know ADHD specifically, but in my class, I have children with symptoms close to those with ADHD, like hyperactive children.

According to the findings above, the responses show that ADHD-related behaviors are common across classrooms, with several teachers (Teachers 1, 2, 3, 5, 6) noting that they regularly work with children displaying symptoms like hyperactivity and inattention. Some teachers reported having more than one child with these behaviors in their classrooms, indicating that ADHD-related symptoms might be widespread (Teacher 2, Teacher 6). However, some teachers (Teacher 4, Teacher 7, Teacher 8) were uncertain whether these

behaviors were linked to ADHD specifically, suggesting a gap in diagnosis or knowledge about the disorder.

Question 02: Can you identify a child with ADHD?

Table 3-2 Teachers' Ability to Identify Children with ADHD

<i>Teachers</i>	<i>Original Responses</i>	<i>English Translation</i>
<i>Teacher 01</i>	من الصعب تحديد ما إذا كان الطفل يعاني من اضطراب فرط الحركة وتشتت الانتباه، كما قلت من قبل، ولكن سلوكياتهم عادة ما تكون مرتبطة بهذا الاضطراب	<i>It is hard to tell if a child has ADHD, as I said before, but their behaviors are normally associated with this disorder.</i>
<i>Teacher 02</i>	بناءً على خبرتي نعم	<i>Based on my experience, yes.</i>
<i>Teacher 03</i>	بما أن طفلي يعاني من اضطراب فرط الحركة وتشتت الانتباه ، أستطيع بسهولة التعرف على طفل يعاني من نفس الاضطراب	<i>Since my kid has ADHD, I can easily identify a child with ADHD.</i>
<i>Teacher 04</i>	بصفتي معلمة، من الصعب قليلاً أن أقول إن طفلاً ما يعاني من اضطراب فرط الحركة وتشتت الانتباه لأننا لسنا على دراية دقيقة بأعراض هذا الاضطراب. ومع ذلك، وبناءً على تجربتنا، نلاحظ أن بعض الأطفال لديهم سلوك مميز يختلف عن زملائهم في القسم	<i>As a teacher, it is a little bit hard to say that a child has ADHD because we are not aware of the exact symptoms of this disorder. However, based on our experience, we notice that some children have distinct behavior compared to their classmates.</i>
<i>Teacher 05</i>	Yes, I can.	<i>(Response given in English)</i>
<i>Teacher 06</i>	I can recognize the signs.	<i>(Response given in English)</i>
<i>Teacher 07</i>	لا أستطيع التمييز بين ما إذا كان التلميذ يعاني من الاضطراب أم أنه فقط يملك طاقة زائدة	<i>I cannot distinguish between the pupil and whether he has the disorder or just has too much energy.</i>
<i>Teacher 08</i>	التلاميذ الذين يعانون م اضطراب فرط الحركة وتشتت الانتباه لديهم أعراض واضحة	<i>Pupils with ADHD have clear symptoms.</i>

The responses reflect varying levels of confidence and awareness among teachers when it comes to identifying children with ADHD. Five teachers (Teachers 2, 3, 5, 6, 8) expressed confidence in identifying children with ADHD, often citing clear and distinct behaviors as markers. For example, one teacher (Teacher 3) linked their ability to recognize ADHD to their personal experience of parenting a child with the condition. Three teachers admitted challenges

in making a clear distinction. For instance, (Teacher 7) mentioned being unsure whether a child has ADHD or is simply energetic. Another teacher (Teacher 4) stated that while they observe behaviors typically associated with ADHD, they find it difficult to make a definitive judgment without a formal diagnosis. This highlights a potential gap in professional development and awareness, which may lead to inconsistencies in identifying and supporting children who show ADHD behaviors.

Question 03: What behaviors have you observed in children who show signs of ADHD in your classroom?

Table 3-3 Teacher-Observed Behaviors Associated with ADHD in the Classroom

Teachers	Original Responses	English Translation
Teacher 01	يفقدون تركيزهم بسرعة، وأحياناً يفقدون أدواتهم	They lose focus quickly, sometimes they lose their materials.
Teacher 02	يفقدون تركيزهم، مفرطون في النشاط. أنا تقريباً أكرر لهم أن يبقوا هادنين أكثر من 10 مرات في اليوم	They lose focus, overactive. I almost repeat to them to be quiet more than 10 times a day.
Teacher 03	يجيبون عن الأسئلة دون رفع أيديهم، ودانماً يأتون إلى مكنتبي فقط ليعطوني إجابات على الأسئلة التي طرحتها، وعندما أخبرهم بالعودة إلى أماكنهم، يفعلون ذلك مرة أخرى	Call out answers without raising their hands, and they always come to my desk just to give me responses to questions I have asked, and whenever I tell them to go back to their places, they do it again..
Teacher 04	عموماً يشردون بخيالهم يعانون من صعوبة في الجلوس بثبات، يتحدثون كثيراً، يواجهون صعوبة في اتباع التعليمات، ويفقدون التركيز بسهولة. وأنا متأكدة أنني نسيت بعض الأعراض	Generally, they are daydreaming, struggling to sit still, talking a lot, struggling to follow instructions, and easily losing focus. And I am sure that I have forgotten some.
Teacher 05	Forget their books and stuff multiple times, and they are overactive in class.	(Response given in English)
Teacher 06	Overactive, and they leave their seats multiple times.	(Response given in English)
Teacher 07	يتكلمون كثيراً، يفقدون السيطرة و مفرطين في النشاط	Talkative, lose control, and overactive.
Teacher 08	يواجهون صعوبة في البقاء في أماكنهم ويتحدثون كثيراً	They struggle to stay in their places and talk a lot.

Teachers gave different answers to this question. Four teachers (Teachers 1, 2, 4, 5) reported behaviors such as losing focus, daydreaming, and forgetting materials. These signs

reflect the inattention aspect of ADHD. Additionally, (Teachers 3, 7) reported Impulsive behaviors. For instance, (Teacher 3) highlighted that children call out answers without raising their hands and often approach the teacher's desk without being asked. Despite being told to return to their seat, the behavior repeated itself, indicating difficulties with self-control and an understanding of classroom boundaries. Also, hyperactivity was the most commonly reported behavior, with the majority of teachers (Teachers 2, 3, 4, 5, 6, 7, 8) noting that children were overactive, unable to stay seated, and talked excessively. For instance, (Teacher 2) mentioned having to remind children to stay calm and quiet multiple times during the day. This aligns with the hyperactive nature of ADHD, where children have excess energy and difficulty sitting still, which can be disruptive to the class.

Question 04: Have you received any training about ADHD in a teacher training or professional development program?

(Follow-up if yes: What type of training did you receive, and how helpful was it to you?)

Table 3-4 Teachers' Training and Professional Development on ADHD.

<i>Teachers</i>	<i>Original Responses</i>	<i>English Translation</i>
Teacher 01	لم أتلق أي تدريب حتى الآن	<i>I have not received any training yet.</i>
Teacher 02	لا لم أتلق	<i>No, I didn't.</i>
Teacher 03	لا لم أتلق	<i>No, I didn't.</i>
Teacher 04	لقد تلقيت تدريباً، لكن ليس حول هذا النوع من الاضطرابات	<i>I have received training, but not about this kind of disorder.</i>
Teacher 05	<i>No, I didn't.</i>	<i>(Response given in English)</i>
Teacher 06	<i>I have received fifteen days of training about different modules, but I have not received any module on ADHD teaching training.</i>	<i>(Response given in English)</i>
Teacher 07	لا لم أتلق	<i>No, I didn't.</i>
Teacher 08	لا لم أتلق	<i>No, I didn't.</i>

Based on the responses to question 04 regarding whether teachers have received training on ADHD, it is evident that all teachers haven't received specific training on ADHD as part of

their teacher training or professional development programs. Out of the eight teachers interviewed, six stated that they had not received any training related to ADHD. Two teachers (Teachers 4 and 6) mentioned receiving training on other modules but clarified that they did not include any focus on ADHD. This may indicate the lack of teachers' preparedness, which impacts the ability to teach a child with the disorder.

Question 05: Do you feel that teachers in general are well prepared to support children with ADHD? Why or why not?

Table 3-5 Teachers' Perceptions of General Preparedness to Support Children with ADHD.

<i>Teachers</i>	<i>Original Responses</i>	<i>English Translation</i>
<i>Teacher 01</i>	لا، معظم المعلمين يكتسبون الخبرة من خلال الممارسة وليس من خلال تدريب مناسب	<i>No, most teachers learn from experience rather than proper training.</i>
<i>Teacher 02</i>	العديد من المعلمين غير مستعدين بسبب نقص التدريب	<i>Many teachers are not prepared due to a lack of training.</i>
<i>Teacher 03</i>	معظم المعلمين لا يملكون المعرفة المناسبة لتلبية احتياجات الأطفال الذين يعانون من اضطراب فرط الحركة وتشتت الانتباه	<i>Most teachers don't have the proper knowledge to meet ADHD children's specific needs.</i>
<i>Teacher 04</i>	لا، لا أعتقد ذلك. السبب هو أن معظم المعلمين لم يتلقوا تدريباً متخصصاً حول كيفية تدريس الأطفال الذين يعانون من مثل هذا الاضطراب	<i>No, I don't think so. The reason is that the majority of teachers didn't receive specialized training on how to teach children with such a disorder.</i>
<i>Teacher 05</i>	<i>No, we mostly rely on personal experience.</i>	<i>(Response given in English)</i>
<i>Teacher 06</i>	<i>Yes, but only if they receive appropriate training.</i>	<i>(Response given in English)</i>
<i>Teacher 07</i>	لا، هم غير مستعدين بشكل جيد. وذلك بسبب قلة المعرفة حول هذا الاضطراب	<i>No, they are not well prepared. Because of the limited knowledge about this disorder.</i>
<i>Teacher 08</i>	لا، هم غير مستعدين بشكل جيد. نحتاج إلى تدريب خاص مرتبط بهذا النوع من الاضطرابات	<i>No, they are not well prepared. We need special training related to such a disorder.</i>

All teachers shared a similar perspective: they feel unprepared to help children with ADHD. The most common reason mentioned was a lack of training. Some of them talked about how they often depend on their teaching experiences rather than on formal educational training

(Teachers 1 and 5). In addition, (Teachers 6 and 8) expressed that better training could boost teachers' confidence and their ability to support these children more effectively.

Question 06: How do you think your level of preparedness impacts the academic performance and behavior of children with ADHD?

Table 3-6 Teachers' Perceptions of the Impact of Their Preparedness on ADHD Children's Academic Performance and Behavior

Teachers	Original Responses	English Translation
Teacher 01	حسب خبرتي فإن المعلمين الذين لا يمتلكون الجاهزية أو معرفة مسبقة باضطرابات مثل اضطراب فرط الحركة وتشتت الانتباه لا يمكنهم مساعدة هؤلاء التلاميذ بشكل كافٍ أو تقديم الدعم الذي يحتاجونه	Based on my experience, teachers with no preparedness or prior knowledge of children's disorders like ADHD cannot help them enough or give them the support that they need.
Teacher 02	إذا تلقيت التدريب المناسب حول هذا الاضطراب، فسأكون قادرًا على تدريسهم بشكل أفضل	If I get the proper training for this disorder, I will be able to teach them better.
Teacher 03	بسبب تجربتي مع طفلي في المنزل، اكتسبت بعض المعرفة بنفسي. طبقت بعض التقنيات وحصلت على نتائج. لذا في رأيي، إذا حصل المعلم على المعرفة المناسبة عن هذا الاضطراب، سيتمكن من التحكم في الوضع ومساعدة طلابه على أداء أفضل في الفصل	Because of my experience with my child at home, I have gained some knowledge on my own. I applied some techniques and I received results. So in my opinion, if the teacher receives the proper knowledge about this disorder, he will control the situation and help his students to do better in class.
Teacher 04	لا أشعر أنني جاهزة على الإطلاق. نحن بحاجة إلى مزيد من المعرفة حول هذا الاضطراب، ونعم، إذا لم يكن المعلمون مستعدين بشكل جيد، فلن يتمكنوا من تقديم الدعم الكافي للطفل المصاب باضطراب فرط الحركة وتشتت الانتباه. أنا دائمًا أحاول أن أبذل قصارى جهدي لمساعدتهم، لكن هذا لا يزال غير كافٍ	I don't feel prepared at all. We need more knowledge about this disorder, and yes, if the teachers are not well prepared, they cannot give enough support to the child with ADHD. I always try my best to help them, but this is still not enough.
Teacher 05	Enough preparedness will help ADHD children perform better in their studies.	(Response given in English)
Teacher 06	Being well-prepared allows for better teaching methods to meet the needs of ADHD children.	(Response given in English)
Teacher 07	لا أشعر أنني جاهزة تمامًا ، وإذا تلقيت تدريبًا خاصًا، فسأتمكن من تقديم المزيد لهؤلاء التلاميذ	I don't feel I am fully prepared. And if I receive special training, I can offer more to these children

Teacher 08	المعلمون الذين يمتلكون معرفة مناسبة سيتمكنون من مساعدة الطفل الذي يعاني من الاضطراب بشكل أفضل	Teachers with a proper knowledge will help the child with the disorder better
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The responses emphasize the critical role that teacher preparedness plays in supporting children with ADHD effectively. (Teachers 1, 4, 7) believe that a lack of proper preparation makes it difficult to support children with ADHD effectively. They believed that without adequate training, they could not manage the behaviors or meet the academic needs of these children. One teacher (Teacher 3), however, stated that with experience and personal knowledge of having a child with ADHD, she felt more confident and better able to help. Overall, the majority emphasized the need for specific training programs to improve their preparedness.

Question 07: What challenges do you face in supporting children with ADHD?

(Follow-up: How do these challenges impact your teaching and classroom environment?)

Table 3-7 Challenges Faced by Teachers in Supporting Children with ADHD.

Teachers	Original Responses	English Translation
Teacher 01	أكبر تحدي هو الحفاظ على تركيزهم. أفقد الوقت في محاولة إبقائهم مركزين على الدرس. كما أنني لا أتلقى الدعم من بعض الآباء. أحياناً أناقش وضع بعض الأطفال مع أولياء أمورهم، لكنني لا أتلقى الدعم المطلوب منهم، ربما لأنهم يعتبرون الوضع حالة طبيعية	<i>The biggest challenge is to keep them focused. I lose time keeping them focused on the lesson. Also, I don't have support from some parents. Sometimes I discuss the situation of some children with their parents, but I don't receive the required support from them, maybe because they describe the situation as a normal condition.</i>
Teacher 02	أجد نفسي غالباً أكرر التعليمات عدة مرات، مما يستهلك وقتاً من باقي القسم. أحياناً لا أستطيع إتمام الدرس في الوقت المحدد	<i>I often find myself repeating instructions multiple times, which takes time away from the rest of the class. Sometimes I cannot finish the lesson on time.</i>
Teacher 03	من الصعب عليّ الحفاظ على انتباههم دون إزعاج الآخرين، وكذلك إبقاؤهم في مقاعدهم دون حركة مفرطة. هذه التحديات تؤثر أيضاً على الأطفال الآخرين	<i>Keeping their attention without disrupting others is difficult for me also keep them in their chairs without much movement. These challenges affect other children too.</i>
Teacher 04	أواجه العديد من التحديات، لكن أكبرها هو التوازن بين احتياجاتهم واحتياجات باقي القسم، مما يجعلني أشعر وكأنني لا أفعل ما يكفي من أجلهم. هذا التحدي أثر على تدريس باقي القسم	<i>I face many challenges, but the biggest one is balancing their needs with those of the entire class, which in turn makes me feel as if I'm not doing enough for them. This challenge affected the teaching of the rest of the class.</i>

Teacher 05	With the large number of children in the classroom, it is very difficult to give extra support to one child without neglecting others. Time doesn't allow us to keep all children focused because we must stick to the schedule.	(Response given in English)
Teacher 06	I got overwhelmed; lesson planning, presenting the lesson, and dealing with children with special needs like ADHD, especially if they did not understand the lesson, lost focus, or were overactive in class, made me not able to control the class.	(Response given in English)
Teacher 07	إبقاؤهم مركزين. تؤثر هذه المشكلة على القسم لأنني سأحتاج إلى وقت أكثر للحفاظ على تركيزهم وإشراكهم في الدرس	Keeping them focused. This challenge affects the classroom because I will take more time to keep them focused and engaged in the lesson.
Teacher 08	هناك أوقات لا يتعاون فيها الطفل، لا يتبع التعليمات، يتحدث كثيراً مع زملائه، ويزعج القسم. على الرغم من أنني أبذل قصارى جهدي، إلا أنني ما زلت أشعر بأنني لا أستطيع تقديم ما يحتاجه. في هذه الحالة، سيشعر المعلم بالتعب والإجهاد	There are times when the child does not help you cooperate, doesn't follow instructions, talks a lot with his peers, and disturbs the class. Even though I do my best, I still feel I don't The teacher in this case will feel tired and stressed.

All teachers present different challenges they face in supporting children with ADHD. For instance, (Teacher 2) struggles with constantly repeating instructions, which takes time away from the rest of the classroom. (Teacher 01) feels unsupported by parents, which makes it harder to address the children's needs effectively. Also, the difficulty of balancing the needs of ADHD children with the rest of the class (Teachers 4, 5). These challenges, according to the teachers, impact the classroom environment by disrupting the flow of the lesson. One of them (Teacher 6) expressed that this made them feel overwhelmed, as they struggled to control the class. Overall, these responses highlight the need for additional training and support, both from

parents and schools, to address these challenges effectively and to create a better environment for all learners.

Question 08: Do you feel there is adequate support from the school (e.g., administration) in managing children with ADHD?

(Follow-up: What additional support would help?).

Table 3-8 Teachers' Perception of School Support in Managing Children with ADHD

Teachers	Original Responses	English Translation
Teacher 01	لا، أنا لا أرى ذلك. الدعم الوحيد الذي أحصل عليه هو من زملائي المعلمين، بناءً على تجاربهم، يساعدونني قليلاً، لكن ما زلت متأكدة بنسبة 100% أن المعلمين بحاجة إلى تدريب لدعم هؤلاء الأطفال، خصوصاً في هذه المرحلة المبكرة	No, I don't see that. The only support that I have is from my colleagues' teachers, based on their experiences, they help me a little bit, but still, I am 100% sure that teachers need training to support these kinds of children, especially in this early stage.
Teacher 02	لا يوجد دعم، ولا موارد، ولا برامج تدريبية، وهذا غير عادل بالنسبة لنا كمعلمين وللأطفال. برامج التدريب الخاصة ستساعدنا كثيراً	There is no support, no resources, and no training programs, which is not fair to us as teachers and to the children. Special training programs would help us a lot.
Teacher 03	لم أتلقِ الدعم الكافي فقط أتعلم وأواجه الأمور بمفردي أعتقد أن المعلمين بحاجة إلى برامج تدريبية خاصة تتعلق بالأطفال ذوي مثل هذا الاضطراب	I didn't receive enough support. I just figure things out on my own. I believe that teachers need special training programs related to children with such a disorder.
Teacher 04	يتوقعون منا التعامل مع كل شيء دون تقديم دعم إضافي. نحن بحاجة إلى حل، مثل برامج تدريب	They expect us to handle everything without giving extra support. We need a solution, like training programs.
Teacher 05	No, I have never received formal training on ADHD, and what I know about this disorder comes from personal experiences. Teachers need support, like training programs, to teach ADHD children.	(Response given in English)
Teacher 06	I have discussed this problem with other teachers, but what we need is special training programs.	(Response given in English)
Teacher 07	في معظم الأوقات، أتلقى الدعم من المعلمين الآخرين عندما أواجه صعوبات	Most of the time, I receive support from other teachers when I face obstacles. Yes, we need training programs to learn how we deal with these kinds of children.
Teacher 08	الدعم محدود. يحتاج المعلمون إلى دعم إضافي مثل برامج تدريب خاصة	There is limited support. Teachers need additional support, like special training programs.

All the teachers expressed a clear concern that there is insufficient support from the school in managing ADHD children. One teacher (Teacher 1) reported that the only support they receive comes from colleagues, who offer guidance based on their personal experiences. However, they feel that this is not enough. Overall, the teachers stated that adequate support, such as specialized training programs, would greatly enhance their ability to support ADHD children.

Question 09: What strategies do you use to manage ADHD-related behaviors, such as inattention or hyperactivity?

Follow-up: Can you give an example of using these strategies?)

Table 3-9 Strategies Employed by Teachers to Manage ADHD-Related Behaviors.

Teachers	Original Responses	English Translation
Teacher 01	أحاول جعل الأنشطة بسيطة قدر الإمكان، وأستخدم التكرار كثيراً. كما أنني أجلس الطفل الذي يفقد التركيز بسرعة بعيداً عن مصادر الإلهاء مثل الباب والنوافذ	I try to make the activities as simple as possible, and I use repetition a lot. Also, I place the child who loses focus quickly near front distractions like doors and windows.
Teacher 02	أستخدم تعليمات واضحة وبسيطة	I use clear and simple instructions.
Teacher 03	أستخدم أساليب التشجيع، مثل قول "عمل رائع" أو الطلب من زملائه أن يصفقوا له، كما أقدم مكافآت مثل الحلوى عند حل الأنشطة، وأضع ملصقات النجوم في دفاترهم عند تقديم إجابات صحيحة	I use positive reinforcement, for example, telling them "great job or telling his peers to clap their hands for him", I also give rewards like giving candy for solving tasks, and I give stars stickers in their notebooks for the correct answers.
Teacher 04	ليس كثيراً، لكن أحياناً أستخدم الألعاب لجذب انتباههم عندما ألاحظ أنهم يفقدون التركيز. كما أنني أستخدم الوسائل البصرية مثل الصور والرسومات، وأحاول تكرار التعليمات عدة مرات	Not often, but sometimes I use games to keep them engaged when I see them losing focus. also, I use visual aids like pictures and drawings, and I try to repeat instructions multiple times.
Teacher 05	I avoid long activities	(Response given in English)
Teacher 06	One of the strategies that helps me manage such behaviors is to offer a reward for every correct answer or when they behave well.	(Response given in English)
Teacher 07	اجعل القواعد بسيطة و أذكرهم بها عدة مرات	Keep the rules simple and remind them multiple times.
Teacher 08	أقسم الأنشطة إلى أجزاء	I break the activities into parts.

The teachers shared a variety of ways they handle ADHD-related behaviors, and it's clear they try to make the classroom environment as supportive as possible, including making tasks simple, providing clear instructions, and repeating them often. They also use positive reinforcement, such as giving praise, rewards like candy or stickers, adjusting the seating arrangement, breaking tasks into smaller parts, or avoiding long activities. Visual aids and games are also used by teachers to keep children engaged and focused.

Question 10: How do you modify your teaching style to help children with ADHD succeed?

Table 3-10 10 Modifications in Teaching Style to Support Children with ADHD.

Teachers	Original Responses	English Translation
Teacher 01	أحاول جعل التعلم ممتعًا قدر الإمكان	<i>I try to make learning as fun as possible.</i>
Teacher 02	أحاول الحفاظ على هدوء القسم وانضباطه، ولكن من وجهة نظري، الأطفال الذين يعانون من اضطراب ADHD يحتاجون إلى مساعدة إضافية لا أستطيع تقديمها، وأتمنى لو كان هناك المزيد من التدريب حول هذا الاضطراب	<i>I try to keep the class quiet and disciplined, but in my opinion, children with ADHD need extra help that I cannot provide, and I wish there were more training about this disorder.</i>
Teacher 03	هم نشيطون جدًا ويحبون التحرك كثيرًا، لذلك في معظم الأوقات أفضل تحضير الأنشطة المعتمدة على الألعاب	<i>They are so active and they like to move around a lot, so most of the time I prefer to prepare activities based on games.</i>
Teacher 04	أحرص دائمًا على إشراكهم في القسم	<i>I always keep them engaged in the classroom.</i>
Teacher 05	Honestly, I find it hard to adjust my teaching just for two or three children. I try to be patient, but I cannot always change the lesson plan.	<i>(Response given in English)</i>
Teacher 06	I might have them work in pairs, and I keep the activities short and clear. I try to simplify the question and help them until they get the answer by themselves.	<i>(Response given in English)</i>
Teacher 07	أنا لا أعدل أسلوب تدريسي، ولكنني أبذل جهدًا إضافيًا لتبسيط الدرس	<i>I don't modify my teaching style, but I make extra effort to simplify the lesson.</i>

Teacher 08	ليس لدي استراتيجية واضحة، لكنني أحاول جاهداً مساعدتهم على فهم الدرس بشكل كامل، كما قلت سابقاً، أستخدم الوسائل البصرية	<i>I don't have a clear strategy, but I try my best to help them fully understand the lesson, like I said before, I use visual aids.</i>
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The teachers give different responses. Five teachers (Teachers 1, 3, 4, 6, 7, 8) focus on making lessons more engaging by using games, keeping children active, using visual aids, simplifying instructions, and using pair work. Another teacher (Teachers 5) expressed frustration, stating that it's difficult to adjust their teaching for just a few children with ADHD, as they are not always able to modify their lesson plans effectively. Additionally, one teacher (Teacher 2) emphasizes the need for more discipline and structure in the classroom, with the importance of specialized training.

Question 11: What do you think could be done to better support children with ADHD in your classroom?

Table 3-11 Teachers' Suggestions for Improving Support for Children with ADHD.

Teachers	Original Responses	English Translation
Teacher 01	كما قلت، نحتاج إلى برنامج تدريبي مخصص للأطفال الذين يعانون من ADHD. اضطرابات مثل	<i>As I said, we need a training program specific to children who have disorders like ADHD.</i>
Teacher 02	أي شيء يمكن أن يساعدهم سيكون جيداً، مثل برامج التدريب لمساعدتنا على فهم طريقة تعليمهم	<i>Anything that could help them would be good, like training programs to help us understand the way of teaching them.</i>
Teacher 03	أعتقد أن الأطفال الذين يعانون من ADHD سيتفوقون في الأقسام الصغيرة والمتخصصة بهذه الطريقة، يتم منحهم المساحة لتحقيق النجاح. أيضاً، كما أن القدرة على تعديل طريقة تدريس الدروس يمكن أن تساعدنا في تلبية احتياجاتهم	<i>I believe that children with ADHD would do better in smaller and specialized classes. In this way, it's giving them the space to succeed. Also, flexibility in lesson planning could help us to fit their needs.</i>
Teacher 04	برامج التدريب وتقليل عدد الطلاب في القسم سيساهمان في تحسين الوضع	<i>Training programs and a small class size will help to improve the situation.</i>
Teacher 05	Sometimes I feel stuck with the curriculum, and I think those children need a specially designed activity to meet their needs. Also, specialized training is essential in this case.	<i>(Response given in English)</i>
Teacher 06	At the very least, programs specifically designed to teach	<i>(Response given in English)</i>

	<i>teachers how to support and teach them.</i>	
Teacher 07	يحتاج هؤلاء الأطفال إلى اهتمام أكثر مما يمكن أن تقدمه الأقسام الدراسية العادية. بخلاف ذلك فإن برامج التدريب ستساعدنا كثيرًا كمعلمين	<i>These Children need more attention than what a general classroom can offer. Otherwise, training programs would help us a lot as teachers.</i>
Teacher 08	مواد متخصصة، وبرامج تدريب، وتحسين التواصل مع الآباء يمكن أن تساعد كثيرًا في فهمهم وتعليمهم بشكل أفضل	<i>Specialized materials, training programs, and better communication with parents can help a lot in understanding them and teaching them better.</i>

The responses to this question reveal that teachers have a strong consensus on the need for specialized support to help ADHD children succeed. All teachers agreed on the need for specialized training related to ADHD children. Some teachers mentioned that such training would provide them with the tools and strategies to manage ADHD-related behaviors more effectively (Teachers 2, 4, 7, 8) Additionally, two teachers (Teachers 3, 7) suggested smaller class sizes and specialized classes, while other teacher (Teacher 5) believed that children with ADHD require special activities to succeed. Moreover, one teacher (Teacher 3) emphasized the importance of more flexibility in lesson planning to cater to their specific needs, and Teacher 8 highlighted the significance of good communication with parents. Overall, these responses suggest a comprehensive understanding of the strategies needed to support ADHD children in an educational setting. They underscore the importance of training, individualized approaches, and collaborative efforts between teachers and parents to ensure successful outcomes for learners with ADHD.

3.2.2 Summary of the Results from Teacher Interviews

The findings from teachers' interviews highlight significant deficiencies in the support systems for primary school children diagnosed with Attention-Deficit Hyperactivity Disorder (ADHD). These interviews provided important insights into educators' knowledge, attitudes, and experiences with children displaying ADHD symptoms.

While five (5) teachers had a basic understanding of these symptoms, three (3) others expressed difficulty in associating certain behaviors with the disorder. However, all of the

teachers acknowledged they lacked formal training specifically focused on ADHD, which left them feeling unprepared to adequately support these children. Consequently, three (3) educators expressed that they depend on personal experiences to devise classroom strategies. Some of the strategies mentioned by teachers include breaking lessons into smaller parts or using games to maintain attention, and using visual aids. However, they still face challenges in effectively managing ADHD behaviors, such as struggling to address the diverse needs of children with ADHD while managing the broader expectations of the entire classroom, especially in larger classes with strict curriculum requirements. This challenge frequently led to increased stress, professional frustration, and a feeling of inadequacy in their ability to teach and assist all children, highlighting the need for more specialized support. Moreover, it was consistently noted that every teacher called for an urgent need for specialized ADHD training programs, more flexible teaching approaches, smaller class sizes, enhanced classroom resources, and good collaboration with parents.

In conclusion, the findings from the teachers' interview show that although teachers are making genuine efforts to help children with Attention Deficit Hyperactivity Disorder (ADHD), they are still unprepared. In addition, their effectiveness is significantly hindered by systemic limitations and the absence of adequate training. These findings align with the focus of the research study, which examines how teacher preparedness influence the effectiveness of supporting ADHD children in the primary school setting.

3.2.3 The Results of the Clinical Psychologist's Interview

Question 01: What are the most common symptoms of Attention-Deficit Hyperactivity Disorder that you observe in school-age children?

The clinical psychologist: *Generally speaking, these children may show some impulsivity and impatience, and hyperactivity. They might struggle with memory issues, like forgetfulness and challenges focusing. You may notice they chat quite a bit and have a hard time staying still at school because they're full of energy. Sometimes they forget their school supplies or even misplace them during class. They can find it tough to finish their assignments, stay organized, and follow rules.*

Question 02: What challenges do children with ADHD typically face in the classroom?

The clinical psychologist: *In fact, the symptoms of the disorder at the same time can be listed as challenges or difficulties, as I mentioned, forgetting or losing his school supplies, not completing school tasks or making mistakes in exercises, difficulty sitting for long periods, lack of concentration, problems not understanding his classmates, not respecting the teacher's orders, for example, if you ask him not to talk or sit regularly, he does not respect these orders.*

Question 03: What are teachers' main difficulties when working with ADHD?

The clinical psychologist: *Teachers face difficulty controlling the child's behavior. For example, excessive movement is one of the most common behaviors teachers encounter, and they find it difficult to control, which in turn negatively impacts the rest of the class. This negative impact affects the pace and flow of the lesson. In a classroom setting where the lesson is completed in a shorter time, the teacher wastes more time giving instructions such as "keep quiet," "stay in your seat," "concentrate," and "pay attention to the whiteboard." The teacher may deviate from the curriculum to meet the child's needs, but ultimately finds that they are not succeeding due to a lack of sufficient time. Another important point to address is the problems with parents. For example, a child's parents may expect greater results and better behavior in class, only to be surprised by the reality and feel frustrated. Or, if the situation escalates to extremes, the parent may blame the teacher for these results. In reality, neither the teacher nor the children is responsible. Therefore, awareness-raising is crucial in this case.*

Question 04: What strategies or techniques would you recommend for teachers to manage the behavior of these Children in the classroom?

The clinical psychologist: *The teacher must allocate and create timetables for the organization, thus saving time. Instead of giving a full lesson, it's best to divide it into parts, with a short time allocated for each part. This short time can be used to assign the children tasks, such as bringing a notebook from the administration or cleaning the whiteboard. These tasks help them release excess energy. The teacher can use rewards. For example, if the child respects his orders and controls his behavior well, he can be praised with motivating qualities like "well done" or "good job," or given a pen. I often see the teachers offering a reward such as candy or a piece of chocolate, but I do not recommend this, as hyperactive children already have a lot of energy, and sugars can only increase the intensity. Using auditory and visual cues, such as audio, pictures, and videos, is very useful.*

Question 05: Do you believe that special teacher training is needed in supporting ADHD children? Why or why not?

The clinical psychologist: *Yes, of course, there's a difference between a teacher who receives special training and one who doesn't. It allows the teacher to acquire new skills for teaching the child and managing behavior, thus enabling them to effectively deal with the children's mentality and effectively manage behavior such as troublemaking. On the other hand, it helps the teacher enhance their observation skills and understand the nature of the child's disorder, such as anxiety, family problems, and Attention-Deficit Hyperactivity Disorder.*

Question 06: Based on your experience, what advice would you give to a teacher who has just started teaching a child who faces such a disorder?

The clinical psychologist: *I strongly recommend that the teacher be patient, as this disorder is a neurological disorder that the child does not have the ability to control or adjust. Also, I advise monitoring the child frequently and experimenting or devising new methods that suit him, and most importantly, seeking support from specialists and maintaining contact with the child's parents.*

3.2.4 Summary of the Results from the Clinical Psychologist Interview

The clinical psychologist's interview revealed critical insights into the common symptoms and obstacles faced by school-aged children with Attention-Deficit Hyperactivity Disorder (ADHD), along with recommendations to better support them in the classroom.

The psychologist's responses indicate that the main symptoms of ADHD in children involve being impulsive, easily distracted, very active, forgetful, and having trouble staying organized, all of which significantly impact their academic success and behavior at school. Additionally, these symptoms often lead to difficulties following classroom rules, maintaining focus during lessons, and completing assignments, causing disruptions for the affected child and their peers. From the psychologist's viewpoint, educators encounter significant difficulties in managing ADHD-related issues. Teachers frequently report challenges such as handling excessive energy, sustaining classroom order, and addressing the extra time needed for repeated behavioral corrections. This inefficiency disrupts the flow of lessons and often requires curriculum adjustments to better serve children with ADHD. These interruptions, coupled with the limited resources educators have, can lead to frustration and a sense of stagnation in

effectively helping these children. Ultimately, the psychologist stressed the importance of providing teachers with practical tools and knowledge to boost their confidence and efficiency in dealing with ADHD-related challenges. She also underscored the need for collaborative efforts among teachers, parents, and specialists in the pursuit of support.

To conclude, these findings make it clear that teachers' well-preparedness and specialized training are essential for effectively supporting children with ADHD and for creating a more manageable classroom environment.

3.2.5 Analysis of Classroom Observations Results

Table 3-12 Classroom Observation Grid Number 01

General Observations		
General Information	Sidi Yakhlef Okacha (01) Primary Schools. Class level: preschool class. 14 children.	
Classroom Management	Children were seated at separate desks. The teacher maintains a strong presence at the front of the class, walking between desks to monitor behavior. Behavior rules, alphabet, and number charts are displayed near the board. The noise level was medium; occasional talking, laughter, and verbal interruptions occurred.	
ADHD Observations		
Pupils Behavior	Number of Pupils	Comments
Inattention	3	-Two girls are easily distracted by noise and movement. - One child couldn't maintain focus.
Hyperactivity	4	- Two girls cannot sit still. - Two children are very energetic and talk a lot.
Impulsivity	2	- Two children call out answers without raising their hands.
Teachers' Challenges and Strategies		
Teachers' Challenges Observed	The teacher faced several challenges in managing the classroom, particularly regarding minimizing distractions. During the session, she repeatedly had to ask the children to be quiet and calm. Despite her efforts, some children continued to talk, get distracted, and play with their stuff.	

Support Strategies Used	The teacher uses a few basic strategies to manage the children's behavior. She keeps giving the verbal reminders such as: "sit properly, please/ and keep quiet". When she noticed a child or more doing something distracting, she walked over to their desks and tried to speak to them quietly and politely. She kept using physical action when she tried to explain pictures to get the children's focus.
Additional Notes	
The classroom environment was warm and supportive. Despite repeated distractions, the teacher kept calm and showed patience with children who were still getting distracted, finding difficulties staying focused, and showing over activity.	

Table 3-13 Classroom Observation Grid Number 02

General Observations		
General Information	Sidi Yakhlef Okacha (02) Primary Schools. Class level: preschool class. 15 children.	
Classroom Management	Children were seated at separate desks. The teacher began the lesson in a very positive and energetic mood. She greeted each child at the door with a high five, smiling and using their names, which created a welcoming and respectful classroom atmosphere. Before starting the session, she led the whole class in a short warm-up where she asked them to stand up and sit down three times, saying it was to "wake up our bodies and brains." The children responded well and seemed to enjoy this routine. Throughout the class, she used a calm tone, although she had to give frequent reminders to maintain attention and reduce side conversations. The noise level was loud at times. The teacher gave many verbal reminders for the children to quiet down and pay attention.	
ADHD Observations		
Pupils Behavior	Number of Pupils	Comments
Inattention	2	- A girl looks out the window and does not follow the teacher's instructions - A child plays with things inside their desk and does not listen when the teacher is talking.
Hyperactivity	2	- A boy keeps getting up from his chair and walking around the classroom without permission - A girl constantly taps her feet, moves her chair back and forth, and plays with her hair during the lesson.
Impulsivity	2	- One boy often calls out answers without waiting to be asked. -One boy interrupts his classmates while they are speaking.
Teachers' Challenges and Strategies		

Teachers' Challenges Observed	The teacher faced several behavioral challenges during the lesson, including a high noise level, frequent side conversations, and children moving around without permission. She had to give repeated instructions to regain the children's attention and keep them focused.
Support Strategies Used	The teacher used several practical classroom strategies to support children's engagement and manage behavior. Doing a high five and a short physical warm-up helped direct some of their energy. She made all the children participate in the board, and when they finished, she used verbal praise (Good job /you are doing well)
Additional Notes	
Although the classroom was quite noisy throughout the session, with many children talking, fidgeting, and moving around, the teacher appeared used to this environment and knew how to manage it effectively. It was clear that she was familiar with handling this level of classroom energy, showing confidence and experience in dealing with noisy, active young learners.	

Table 3-14 Classroom Observation Grid Number 03

General Observations		
General Information	Ibn Sina Primary School. Class level: grade 01 class. 23 children.	
Classroom Management	Children were seated at separate desks. Each desk was covered with a colorful plastic sheet, giving the room a cheerful appearance. At the back of the classroom, children's projects and artwork were neatly displayed, showing a sense of organization and pride in their work. There were also various visual aids and posters on the walls — including numbers, letters, and classroom rules. The classroom was often loud and noisy. Many children were talkative and easily distracted, making it necessary for the teacher to give multiple reminders to be quiet and stay focused. She frequently used phrases like “Stop talking,” and “I need everyone's attention now.” She walked around the classroom regularly, checking each student's notebook and providing individual help.	
ADHD Observations		
Pupils Behavior	Number of Pupils	Comments
Inattention	3	- One girl is playing with objects on the desk and does not follow instructions. -2 boys are easily distracted by noise and classroom movement, showing limited focus on the teacher.
Hyperactivity	4	- 2 boys frequently leave their seats and move around the classroom. - 2 girls are talking to their peers.
Impulsivity	0	
Teachers' Challenges and Strategies		

Teachers' Challenges Observed	<p>The teacher seemed experienced and calm, but it was evident she struggled with ongoing challenges in maintaining order and attention.</p> <p>Throughout the lesson, she had to frequently remind children to stay seated and stop talking.</p> <p>Despite these reminders, some children continued to talk, get up from their seats, or distract others.</p> <p>She sometimes had to pause the lesson to regain control or repeat instructions.</p> <p>The noise level was consistently high, making it hard to keep everyone engaged and stay focused.</p>
Support Strategies Used	<p>The teacher used silence as a strategy to manage the class, pausing her speech and maintaining eye contact with the children until the noise gradually subsided.</p> <p>She consistently moved around the classroom, checking children's work individually.</p> <p>The teacher maintained a calm and soothing tone throughout the lesson, even when addressing disruptions, ensuring that her responses did not escalate tension.</p> <p>She praised positive behavior regularly, such as (good job)</p>
Additional Notes	
The lesson was structured in a way that allowed for some flexibility, such as the quiet moments between parts of the activity.	

Table 3-15 Classroom Observation Grid Number 04

General Observations		
General Information	Razi 01 Primary school. Class level: grade 01 class. 30 children.	
Classroom Management	<p>The classroom was bright and engaging, adorned with children's drawings, letter charts, and number posters. However, it felt crowded due to the high number of children and limited physical space.</p> <p>Traditional rows, desks are closely packed due to limited space.</p> <p>The teacher began by greeting the children and reviewing classroom rules.</p> <p>Noise levels were high, especially during the distribution of materials.</p> <p>The teacher used visual and verbal cues, such as hand signals and verbal reminders, to regain attention.</p>	
ADHD Observations		
Pupils Behavior	Number of Pupils	Comments
Inattention	3	-One boy looks around the room instead of focusing on the teacher -Two boys struggle to concentrate due to the close seating arrangement and distractions around them.
Hyperactivity	3	-One boy and one girl tap their desks playfully and fidget with their objects. -A boy stand up without permission and move around the classroom, increasing the noise and activity level.
Impulsivity	0	
Teacher's Challenges and strategies		

Teachers' Challenges Observed	<p>The teacher struggled to manage the noise level throughout the lesson due to the large number of children in a small space.</p> <p>Children often found themselves chatting with their friends, which could make it a bit challenging for the teacher to keep the classroom calm and focused.</p> <p>She was required to pause the lesson frequently and said multiple verbal reminders to stay quiet and pay attention.</p> <p>It was wonderful to see some children needing individual attention, though the large size of the class made it a bit tricky to balance everyone's needs while keeping the group engaged.</p>
Support Strategies Used	<p>The teacher used basic verbal strategies, such as repeating instructions and asking children to be quiet multiple times.</p> <p>No specific behavioral management tools, like reward systems or visual schedules, were observed.</p>
Additional Notes	
<p>It was clear that the teacher was handling everything in the classroom on her own. She juggled teaching alongside behavior management, which seemed quite challenging given the class's energetic atmosphere and size.</p>	

Table 3-16 Classroom Observation Grid Number 05

General Observations		
General Information	<p>Sidi Yakhlef Okacha (01) Primary Schools. Class level: grade 03. English language Session. 28 children.</p>	
Classroom Management	<p>The classroom was bright and well-organized, creating a welcoming and engaging atmosphere.</p> <p>The classroom had desks arranged in straight rows facing the whiteboard.</p> <p>The environment felt positive and structured.</p> <p>The classroom was quite noisy.</p>	
ADHD Observations		
Pupils Behavior	Number of Pupils	Comments
Inattention	3	<p>-One child fails to follow instructions and seems unaware of what is expected.</p> <p>-A second child is easily distracted by noise and peers.</p> <p>-A third child fidgets with materials and does not focus on the teacher.</p>
Hyperactivity	2	<p>- One boy gets out of his desk without permission and moves around the classroom.</p> <p>- Other boy is overly talkative and interrupts the teacher during explanations.</p>
Impulsivity	2	<p>- One boy plays with a friend's hair and ignores the teacher's instructions</p>

		- One boy answers out of turn, getting excited and not waiting for his friend's response
Teachers' Challenges and Strategies		
Teachers' Challenges Observed	<p>The teacher struggled to manage the high noise level, as many children were talking over each other and distracting their peers. Keeping the children focused on the task was challenging, particularly because some were easily distracted. Interruptions from children who wanted to answer the questions immediately were a challenge, as they disrupted the flow of the lesson. The teacher also had to remind them frequently to raise their hands and wait for their turn to speak, which led to some loss of instructional time.</p>	
Support Strategies Used	<p>The teacher used verbal reminders to encourage the children to stay focused and raise their hands before answering, helping to manage interruptions. The teacher displayed pictures related to the topic on the whiteboard to engage the children's attention, using visual aids to reinforce key concepts and keep the class focused.</p>	
Additional Notes		
Even though the teacher repeatedly asked the children to be quiet, the noise level stayed high, which made it harder to keep the class focused		

Table 3-17 Classroom Observation Grid Number 06

General Observations		
General Information	Razi 01 Primary Schools. Class level: grade 03. English language session. 30 children.	
Classroom Management	<p>The classroom was arranged in traditional rows, with around 30 children seated closely together. There were colorful pictures and lesson-related visuals on the whiteboard to support the topic. The teacher had planned her lesson, but the classroom was quite noisy, making it difficult for her to maintain the children's focus. She made an effort to walk around, check on the children's work.</p>	
ADHD Observations		
Pupils Behavior	Number of Pupils	Comments
Inattention	4	<p>- One boy has difficulty focusing during the lesson. -One boy stares out the window, clearly distracted and disengaged from the activity. -Two girls play with classroom materials instead of paying attention to the task.</p>

Hyperactivity	1	- One boy gets up from their seat unnecessarily during the lesson.
Impulsivity	2	- Two girls are highly talkative and distract others during the activity.
Teachers' Challenges and Strategies		
Teachers' Challenges Observed	One major challenge was the high noise level, which disrupted the flow of instruction and made it harder for students to hear and concentrate. The teacher had a hard time controlling the high level of hyperactivity in the classroom, especially with children who were constantly leaving their seats and moving around.	
Support Strategies Used	The teacher mostly relied on simple verbal reminders like " <i>sit down,</i> " or " <i>pay attention,</i> " and " <i>stop talking</i> " to manage the children's behavior, but these had limited effect. She didn't use many structured strategies to redirect or support children who were distracted or hyperactive. Occasionally, she walked around the classroom and quickly commented on individual children.	
Additional Notes		
At one point during the lesson, the teacher came over to me and quietly reminded me to be patient with the classroom environment, and she said to me, " <i>These children need constant reminders; and it's hard to keep everyone focused.</i> ", showing she was aware of the challenges but didn't have many tools or support to manage them. The noise level and some children's energy made the lesson harder to manage. It was evident that a more structured approach or additional support could help her manage the class more effectively.		

3.2.6 Summary of the Results from the Classroom Observation

The six classroom observations carried out in four (04) primary schools in Beni Saf, Ain Temouchent, presented a number of ongoing patterns of behavior and teaching problems related to ADHD characteristics and teachers' preparedness to address them. These findings offer insights into the dynamics of classrooms with children exhibiting ADHD-related behaviors.

In all classes observed, teachers employed a variety of classroom management techniques, such as seating arrangements, verbal reminders, and moving around the classroom to monitor children's behavior. Despite these efforts, noise levels remained high, especially in larger classes or those with limited space. Additionally, the observations revealed significant variations in behaviors and symptoms among children. Most children displaying noticeable ADHD symptoms struggled to focus on lessons, frequently losing attention or becoming easily

distracted by noises, peers, or classroom objects. Some children found it challenging to remain seated, constantly shifting or fumbling with their supplies. Others show impulsive behaviors, interrupting their peers or shouting out answers without raising their hands. These behaviors disrupted the flow of the lesson and left a negative impression of the classroom. Moreover, while all teachers used basic behavioral strategies like verbal reminders, praise for correct answers, and repeating orders, these methods were not always effective. Teachers frequently had to repeat instructions or pause lessons, which affected the overall pacing of the class. In addition, the energy levels in the classrooms were difficult to manage or control. Notably, the observations revealed differences in how teachers responded to these challenges. Generally, all teachers who do not receive specific training expressed difficulty in managing ADHD-related behaviors.

In conclusion, the classroom observations highlight the importance of proper teacher training, as well as the need for structured strategies and additional support to effectively manage ADHD-related challenges. These findings align with the overall research aim of exploring how teacher preparedness impacts the support provided to children with ADHD and suggest that providing special training programs could play a crucial role in helping teachers create more inclusive and productive learning environments.

3.3 Data Discussion and Interpretation

The primary purpose of this research was to investigate teachers' challenges and preparedness in supporting children with ADHD in primary schools in Beni Saf, Ain Temouchnet. Therefore, the study employed three research instruments: interviews with eight primary schools' teachers, an interview with a clinical psychologist, and six classroom observations across four different primary schools. The triangulated findings illuminate significant patterns regarding teacher preparedness, their experiences, challenges, classroom dynamics, and systemic gaps in current educational practices.

One major finding is that all interviewed teachers report that they often feel unprepared to handle ADHD-related behaviors such as inattention, impulsivity, and hyperactivity. This sense of unpreparedness is closely linked to another critical finding in which none of the teachers had received any specialized training focused on ADHD. As a result, teachers often relied on general classroom management techniques rather than strategies specifically designed for supporting children with ADHD. This was evident in classroom observations, where teachers without ADHD-focused training struggled to manage disruptive behaviors. For instance, children exhibiting ADHD symptoms frequently called out answers, moved a lot, left their seats without permission, and interrupted their peers. These behaviors disrupted lesson flow and required frequent redirection. In several cases, teachers appeared unsure of how to respond appropriately.

These results were compatible with the results of recent studies on teacher preparedness for supporting ADHD learners, particularly studies by Ward et al. (2022), Walters (2022), and Youssef et al. (2015). Similar to the conclusions of Ward et al. (2022) and Walters (2022), this study indicates that teachers with limited preparation and insufficient ADHD-specific training face significant challenges in managing ADHD-related behaviors. Walters (2022) noted that a lack of specialized training in ADHD leads to difficulties in handling ADHD behaviors, a point that this study shows. Similar to Walters' (2022) findings, teachers in the current study reported feeling unprepared and lacking confidence in addressing behaviors associated with ADHD. Moreover, Youssef et al. (2015) found that teachers' limited understanding of ADHD negatively affected their ability to effectively support learners. This mirrors the results in this study, where teachers with inadequate ADHD knowledge were less likely to implement effective strategies.

Additionally, the findings highlight significant challenges faced by teachers when managing ADHD behaviors in the classroom, particularly in larger classes with limited resources. In the interviews, teachers reported struggles in managing the behaviors associated

with the disorder, such as difficulty keeping children focused, dealing with constant movement, and handling interruptions during lessons. These challenges often made it hard to maintain classroom order and slowed down the overall teaching process. These responses were confirmed by classroom observations, which provided clear evidence of the same challenges described by the teachers. During classroom observations, many children who show ADHD symptoms displayed inattention, impulsive behavior, and hyperactivity, making it difficult for teachers to maintain lesson flow and manage the classroom effectively. This alignment between interview responses and real classroom situations highlights the real impact of ADHD-related behaviors on teaching and learning. These difficulties, in turn, underscore the importance of specialized training for teachers in ADHD management. Without proper training, teachers may feel ill-equipped to address these specific behaviors effectively, leading to frustration for both children and teachers.

The findings of this study are in line with those of Aldabbagh et al (2024) and Schapiro (2024). Aldabbagh et al. (2024) found that teachers frequently experience feelings of being overwhelmed when trying to manage ADHD symptoms in learners, with many reporting that available support and resources are inadequate. Teachers in this study similarly reported difficulties in managing behaviors associated with inattention, impulsivity, and hyperactivity, which disrupted the classroom and hindered their ability to implement effective instructional strategies. Likewise, Schapiro (2024) highlighted that a substantial number of educators had not received formal ADHD-specific training, which impedes their ability to effectively address ADHD-related behaviors. This aligns with the present study's findings, where teachers reported that inadequate training and resources severely impacted their classroom management skills and their ability to engage ADHD learners effectively.

Furthermore, all interviewed teachers agreed on the importance of a specialized program to help cater to the needs of ADHD children. Two teachers emphasize that the existence of a

general education curriculum does not adequately accommodate the specific needs of children with ADHD. They strongly demand a specialized program that is tailored to address the challenges these children face, rather than relying on a standard curriculum. Such a program should include strategies and content that consider the learning styles and support requirements of children with ADHD. This perspective is supported by the clinical psychologist, who also stressed that teachers without proper training often struggle with behavior management, lesson delivery, and maintaining a supportive learning environment. She noted that training helps teachers develop essential strategies, improve their understanding of ADHD, and enhance their classroom practices. The consistency in these views highlights a shared recognition that effective support for ADHD learners begins with well-prepared educators who are equipped with the knowledge and tools necessary to address their specific needs. It also underscores the critical importance of specific training programs related to ADHD and curriculum reform in creating an inclusive and supportive educational environment for children with ADHD.

To sum up, the data reveals a clear gap between the needs of children with Attention Deficit Hyperactivity Disorder (ADHD) and the level of preparedness many teachers currently have. The overall findings demonstrate that teachers' preparedness plays a critical role in supporting children with Attention Deficit Hyperactivity Disorder (ADHD). Teachers who lack training frequently encounter difficulties in managing prevalent ADHD behaviors, which affects their capacity to maintain a productive classroom. Overall, the findings emphasize the urgent necessity of addressing this gap by implementing more targeted teacher training programs that provide educators with the requisite knowledge and strategies to support all learners effectively.

3.4 Pedagogical Implications

This study primarily aims to explore the preparedness of teachers and the challenges they encounter when supporting primary school children with Attention Deficit Hyperactivity

Disorder (ADHD). The findings indicate that although many teachers recognize the needs of children with ADHD, they frequently feel unprepared and lacking in support for effective responses. They also encounter notable difficulties stemming from inadequate training, insufficient resources, and minimal institutional backing.

This research opens the door to future research studies regarding the teaching and learning processes of children with ADHD, especially in Algeria, where this topic is neglected. The findings of this study can enhance teaching practices in schools. First, it demonstrates that educators require additional training and support to assist children with ADHD in the classroom. The training should aim to equip teachers with an understanding of ADHD behaviors and effective methods for addressing inattention, impulsivity, and hyperactivity through straightforward and practical techniques. This can contribute to establishing a more conducive learning atmosphere for all children. Second, schools should provide teachers with more support, including access to specialists, teaching assistants, or clear plans for working with children who have ADHD. Furthermore, the study highlights the importance of integrating ADHD-related content into teacher training and educational planning. This will better prepare educators to meet the needs of diverse learners and support their academic development. Finally, the study calls for more research in this area, especially in contexts where resources and awareness around ADHD in schools are still insufficient.

3.5 Limitations of the Study

Despite this research has attempted to gain valuable insights, several limitations are acknowledged. First, the research was conducted in four primary schools, meaning the results may not represent all teachers or schools. Additionally, the participant number was also limited, which influences the generalizability of the results. Furthermore, many teachers had very busy schedules, making it challenging to arrange interviews. Third, due to the schools' request, only one observation session was allowed for each classroom. This limited opportunity to capture a

wide range of teaching practices and children's behaviors may have affected the overall richness of the data collected. Lastly, the study focused only on teachers' perspectives. It did not include the perspectives of children with ADHD, their parents, or school administrators, which could have added more depth to the findings.

3.6 Suggestions and Recommendations

Based on the findings of this study, several suggestions and recommendations can be made to improve support for ADHD children in primary school settings:

- Integrating special ADHD teaching in teachers' training focused on understanding ADHD and learning how to use effective classroom management strategies and practical methods to manage and address common behaviors.
- Organizing awareness-raising days to educate and sensitize teachers about the importance of being supportive and cooperative with their students.
- To better support children, particularly those with ADHD, reducing the number of children in each class is a key solution. This adjustment would enable teachers to provide more individualized attention and manage the classroom more effectively
- Providing specialized support by hiring qualified professionals who can help identify, support, and guide children with behavioral or emotional difficulties.
- In primary schools, ensuring that the playground is spacious and clean provides children with a safe environment where they can walk, run, and play freely
- Encourage cooperation between teachers and parents, as good communication can create a more consistent and supportive environment for children with ADHD.
- Many children with ADHD are highly gifted, particularly in artistic areas. Therefore, providing opportunities for these children to showcase their strengths and talents can be an effective approach.

-Teachers need to prioritize using rewards over punishments to motivate children with ADHD and encourage positive behavior.

3.7 Engaging Activities to Capture and Maintain Attention in ADHD Children

Primary school teachers need to use some effective strategies and interesting activities in the classroom that are designed to capture their interest and keep them engaged. These activities should be interactive, fun, and allow movement or creativity, helping children to stay attentive and participate actively in class.

3.7.1 Simon Says

"Simon Says" is a classic listening and attention game where children must carefully follow instructions only when they hear the phrase "Simon says" before the command.

Description

In this game, one person (the teacher or child) acts as "Simon" and gives commands like "Simon says touch your nose" or "Simon says jump in place." Children must follow the command only if it starts with "Simon says." If the command is given without "Simon says," and a child still follows it, they are either gently corrected or asked to sit out. This activity strengthens listening skills, improves attention, develops self-control, and helps children practice following instructions carefully, skills that are especially important for children with ADHD.

3.7.2 Classroom Treasure Hunt

It is an active and fun game where children search for hidden objects or clues around the classroom.

Description

The teacher hides small items, pictures, or written clues in different places. The children should find them by following hints, solving riddles, or checking a list. This activity encourages

movement, improves attention and concentration, and helps children develop problem-solving skills. For children with ADHD, the combination of physical activity and goal-focused searching makes it easier for them to stay engaged and motivated during learning.

3.7.3 Puzzle Challenge

The Puzzle Challenge is a fun activity where children work together to complete a jigsaw puzzle. This task promotes critical thinking, problem-solving, and teamwork skills. For children with ADHD, this activity can be especially helpful because it encourages focus and concentration by engaging them in a hands-on task.

3.8 Conclusion

To sum up, this chapter has attempted to present the analysis of the qualitative data collected through teacher interviews, the clinical psychologist's interview, and classroom observations. First, the interviews with eight primary school teachers across four schools in Beni-Safe Ain Temouchent provided valuable insights into their experiences, challenges, and level of preparedness in supporting children with ADHD. These findings highlighted the diverse difficulties teachers face in the classroom in addressing ADHD-related behaviors. Second, the clinical psychologist's interview offered a professional perspective, enhancing the understanding of ADHD symptoms and effective intervention strategies. This expert input complemented the teachers' perspectives and added depth to the overall findings. Thirdly, the classroom observations provided real-time data on how teachers manage ADHD behaviors in their classrooms. In addition, it helped to assess their level of preparedness in handling the needs of ADHD children, observing their teaching methods, strategies, and interactions gave a clearer picture of how well-equipped teachers are to support these children. Lastly, this chapter also provided recommendations aimed at better supporting children with ADHD. These recommendations focus on improving teacher preparedness and enhancing classroom management strategies to create a more supportive learning environment for ADHD children.

General Conclusion

General Conclusion

The core goal of this study was to investigate teacher preparedness and challenges faced in supporting children with ADHD in the primary school setting in Beni Saf, Ain Temouchent. Additionally, it sought to explore the extent of teacher preparedness, their experiences, challenges, as well as the strategies they employed to manage ADHD-related behaviors in the classroom. This research spanned several chapters, each addressing critical aspects necessary to understand the realities faced by educators, ranging from gaps in training and knowledge to the practical difficulties observed in real classroom settings while teaching children who show ADHD behaviors.

To address the research questions of this study, the data from the teachers' interviews, the clinical psychologist's interview, and the classroom observation were thoroughly analyzed and led to several conclusions. The findings demonstrate that teachers' preparedness, particularly their training related to ADHD, plays a critical role in determining the quality of support they can provide to children with the disorder. Teachers who lacked ADHD-specific training frequently expressed feelings of unpreparedness and uncertainty, especially when managing behaviors associated with ADHD. This lack of training limits their ability to implement targeted support strategies and contributes to difficulties in maintaining effective classroom management. Consequently, the insufficient preparedness of teachers can negatively affect the academic progress and classroom inclusion of children with ADHD.

Additionally, concerning the second research question, the findings reveal that teachers' lived experiences in supporting children with ADHD are marked by persistent challenges, including behavioral disruptions, time constraints, inadequate strategies, and a lack of appropriate resources. These challenges are often intensified by the absence of specialized training, leaving teachers less confident and less able to respond to children's needs effectively. As a result, teaching practices may become more reactive than proactive, meaning that the

instructional methods may become centered on dealing with challenges as they arise instead of preparing strategies to prevent them. This shift can reduce the potential for providing individualized support and fostering inclusive instruction.

Like any research, limitations of this study are concerned. One significant constraint was that the study was limited by its small sample size, being conducted in only four primary schools, which affects the generalizability of the findings. Second, scheduling constraints made interviews difficult. Besides, each classroom was observed only once due to the school's request, limiting the depth of observational data. Additionally, the research focused solely on teachers' perspectives, excluding those of pupils with ADHD, their parents, and school administrators, which could have added more depth to the findings.

This study provided insights into the existing gaps in teacher training concerning ADHD, the practical difficulties teachers face in real classroom settings, and the urgent need for better preparation and resources. These findings underline the importance of implementing specialized training programs for teachers, providing continuous professional support, and developing inclusive strategies that can enhance educational outcomes for children with ADHD.

Ultimately, this research contributes to the existing body of knowledge and calls for further investigation to ensure more supportive and effective learning environments for all learners, especially those with ADHD.

Bibliography

- Adiputra, S. (2019). Perceptions of inclusion education by parents of elementary school-aged children in Lampung, Indonesia. *International Journal of Instruction*, 12(1), 199–212. <https://doi.org/10.29333/iji.2019.12113a>
- Aldabbagh, R., Daley, D., Sayal, K., & Glazebrook, C. (2024). Exploring the Unmet Needs of Teachers of Young Children with ADHD Symptoms: A Qualitative Study. *Children*, 11(9), 1053.
- Ali, Y., Mahmud, N. A., & Samaneh, R. (2015). Current advances in neurofeedback techniques for the treatment of ADHD. *Biomedical & Pharmacology Journal*, 8(SpecialMar), 165.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.
- American Psychiatric Association. (2017). *ADHD: Parents medication guide* (3rd ed.). American Psychiatric Association & American Academy of Child and Adolescent Psychiatry. <https://www.psychiatry.org/getmedia/eea91be3-d9e0-4517-9fcb-3165e9435909/adhd-parents-medication-guide.pdf>
- Arns, M., Conners, C. K., & Kraemer, H. C. (2013). A decade of EEG theta/beta ratio research in ADHD: A meta-analysis. *Journal of Attention Disorders*, 17(5), 374–383.
- Arnsten, A. F. T. (2006). Stimulants: Therapeutic actions in ADHD. *Neuropsychopharmacology*, 31(11), 2376–2383. <https://doi.org/10.1038/sj.npp.1301164>
- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). Introduction to research in education . United States: Wadsworth, Cengage Learning. In *International Conference on English Language Teaching* (pp. 720-729).
- Barkley, R. A. (1998). *Attention-deficit hyperactivity disorder* (2nd ed.). Guilford Press.

- Barry, R. J., Clarke, A. R., & Johnstone, S. J. (2003). A review of electrophysiology in attention-deficit/hyperactivity disorder: I. Qualitative and quantitative electroencephalography. *Clinical Neurophysiology*, *114*(2), 171–183.
- Barry, R. J., Clarke, A. R., McCarthy, R., Selikowitz, M., & Johnstone, S. J. (2005). EEG coherence in adolescents with attention-deficit/hyperactivity disorder. *Clinical Neurophysiology*, *116*(4), 864–876.
- Bekle, B. (2004). Knowledge and attitudes about attention deficit hyperactivity disorder (ADHD): A comparison between practicing teachers and undergraduate education students. *Journal of Attention Disorders*, *7*(3), 151–161.
- Biederman, J., & Faraone, S. V. (2006). The effect of attention-deficit/hyperactivity disorder on employment and household income. *MedGenMed*, *8*, P12.
- Bolinger, S. J., Mucherah, D., Markelz, D., & Andrew, M. (2020). Teacher knowledge of attention-deficit/hyperactivity disorder and classroom management. *The Journal of Special Education Apprenticeship*, *9*(1), 1–14.
- Cameroon's vision 2035. *European Journal of Education Studies*, *8*(7), 113-130. Retrieved from https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.46827%2F63es.v8i7.3808?_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uLiwicGFnZSI6InB1YmxpY2F0aW9uIn19
- Cao, Q., Cao, X., Zhu, X., & Sun, L. (2009). Abnormal resting-state functional connectivity patterns of the putamen in medication-naive children with attention-deficit/hyperactivity disorder. *NeuroImage*, *46*(1), 235–243.
- Centers for Disease Control and Prevention. (2022). What is ADHD? *Centers for Disease Control and Prevention*. <https://www.cdc.gov/ncbddd/adhd/facts.html>

- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (4th ed.). Boston, MA: Pearson
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Diagnostic and Statistical Manual of Mental Disorders. (1994). (4th ed.). American Psychiatric Association.
- DuPaul, G. J., & Stoner, G. (2014). *ADHD in the schools: Assessment and intervention strategies* (3rd ed.). Guilford Press.
- Easwaramoorthy, M., & Zarinpoush, F. (2006). *Interviewing for research*.
https://sectorsource.ca/sites/default/files/resources/files/tipsheet6_interviewing_for_research_en_0.pdf
- EM, V. (2007). Meta-analysis of structural imaging findings in attention-deficit/hyperactivity disorder. *Biol Psychiatry*, 61, 1361-1369.
- Erickson, S. J., & Wilkins, K. M. (2019). A review of changes to the attention deficit/hyperactivity disorder age of onset criterion using the checklist for modifying disease definitions. *BMC Psychiatry*, 19(1), Article 404.
<https://doi.org/10.1186/s12888-019-2337-7>
- Frank-Briggs, A. I. (2011). Attention deficit hyperactivity disorder (ADHD). *Journal of Pediatric Neurology*, 9(3), 291–298.
- Gazzaniga, M. S., Heatherton, T. F., Halpern, D. F., & Heine, S. J. (2018). *Psychological science* (6th ed.). W. W. Norton & Company.
- Goddard, W., & Melville, S. (2004). *Research methodology: An introduction*. Juta and Company Ltd.

- Green, C., & Chee, K. (1997). *Understanding A.D.H.D.: A parent's guide to attention deficit hyperactivity disorder in children* (2nd ed.). Vermilion.
- Hancock, D. R., & Algozzine, B. (2006). *Doing case study research: A practical guide for beginning researchers*. Teachers College Press.
- Hani, A. A. O. E. K., & Allouane, D. Z. (2020). *Primary school teachers' attitude toward children with ADHD: Case study of 1st to 5th primary level in Algeria* (Master's dissertation, Ibn Khaldoun University of Tiaret).
- Hinshaw, S. P., Carte, E. T., Sami, N., Treuting, J. J., & Zupan, B. A. (2002). Preadolescent girls with attention-deficit/hyperactivity disorder: II. Neuropsychological performance in relation to subtypes and individual classification. *Journal of Consulting and Clinical Psychology, 70*(5), 1099–1111. <https://doi.org/10.1037/0022-006X.70.5.1099>
- Hoza, B. (2007). Peer functioning in children with ADHD. *Journal of pediatric psychology, 32*(6), 655-663.
- Ingersoll, B. D. (1998). *Daredevils and daydreamers: New perspectives on attention-deficit/hyperactivity disorder*. Doubleday Dell Publishing Group.
- Kanyagui, D. A. (2023). *Challenges faced by teachers working with children with attention deficit hyperactivity disorder (ADHD) in inclusive schools: A systematic review* (Master's thesis, Jönköping University, School of Education and Communication). <https://hj.diva-portal.org/smash/record.jsf?pid=diva2%3A1762912>
- Kanyagui, D. A. (2023). *Challenges faced by teachers working with children with Attention Deficit Hyperactivity Disorder (ADHD) in inclusive schools: A systematic review* (Master's thesis, Jönköping University). Jönköping University, School of Education and Communication.

- Kaplan, H. I., & Sadock, B. J. (Eds.). (1995). *Comprehensive textbook of psychiatry* (6th ed., Vol. 2, pp. 2295–2310). A Waverly Company.
- Kendall, P. C. (2000). *Childhood disorders*. Psychology Press.
- Kewley, G. D. (2005). *Attention deficit hyperactivity disorder: What can teachers do?* (2nd ed.). David Fulton.
- Khumalo, N. (2024). *Teacher support for students with attention deficit hyperactivity disorder in a special needs school* (Master's dissertation). University of KwaZulu-Natal.
<https://researchspace.ukzn.ac.za/handle/10413/23092>
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Law, G. U., Sinclair, S., & Fraser, N. (2007). Children's attitudes and behavioural intentions towards a peer with symptoms of ADHD: does the addition of a diagnostic label make a difference?. *Journal of Child Health Care*, 11(2), 98-111.
- Lawrence, M. (2012). *The issues and challenges that foundation phase educators experience when teaching learners with Attention Deficit Hyperactivity Disorder (ADHD)* (Doctoral dissertation, University of KwaZulu-Natal, Durban).
<https://researchspace.ukzn.ac.za/items/5c9c5aef-ff91-42ab-b310-e3770eb1bf27/full>
- Lee, Y., & Witruk, E. (2016). Teachers' knowledge, perceived teaching efficacy, and attitudes regarding students with ADHD: A cross-cultural comparison of teachers in South Korea and Germany. *Health Psychology Report*, 4(2), 103–115.
- Makris, N., Biederman, J., Valera, E. M., Bush, G., Kaiser, J., Kennedy, D. N., ... & Seidman, L. J. (2007). Cortical thinning of the attention and executive function networks in adults with attention-deficit/hyperactivity disorder. *Cerebral cortex*, 17(6), 1364-1375.

Marshall, C. and Rossman, G. (1989). *Designing qualitative research*. Newbury Park, CA: Sage.

Martin, A. J., Burns, E. C., & Collie, R. J. (2017). ADHD, personal and interpersonal agency, and achievement: Exploring links from a social cognitive theory perspective. *Contemporary Educational Psychology, 50*, 13-22.

Matthew, M. A., & Nasri, N. M. (2022). Teachers' readiness and knowledge about ADHD students among mainstream school teachers: A systematic literature review. *International Journal of Academic Research in Progressive Education and Development, 11*(3), 1584–1598.

Matthews, D. D. (Ed.). (2003). *Learning disabilities sourcebook* (2nd ed.). Omnigraphics.

Monastra, V. J., Lubar, J. F., & Linden, M. (2001). The development of a quantitative electroencephalographic scanning process for attention deficit–hyperactivity disorder: Reliability and validity studies. *Neuropsychology, 15*(1), 136.

Murtada, M., Hakami, N., Mahfouz, M., Abdelmola, A., Eltyeb, E., Medani, I., ... & Chourasia, U. (2023, October). Multiple cesarean section outcomes and complications: a retrospective study in Jazan, Saudi Arabia. In *Healthcare* (Vol. 11, No. 20, p. 2799). MDPI.

National Institute of Mental Health. (n.d.). *Attention-deficit/hyperactivity disorder (ADHD)*. U.S. Department of Health and Human Services, National Institutes of Health. <https://www.nimh.nih.gov/health/statistics/attention-deficit-hyperactivity-disorder-adhd>

Normand, S., Schneider, B. H., Lee, M. D., Maisonneuve, M. F., Kuehn, S. M., & Robaey, P. (2011). How do children with ADHD (mis) manage their real-life dyadic friendships? A multi-method investigation. *Journal of Abnormal Child Psychology, 39*, 293-305.

Oben, A. I. (2021). Research instruments: A questionnaire and an interview guide used to investigate the implementation of higher education objectives and the attainment of

Said, Z., Huzair, H., Helal, M. N., & Mushtaq, I. (2015). Attention deficit hyperactivity disorder (ADHD) in children and adolescents. *Progress in Neurology and Psychiatry, 19*(3), 16-23.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.

Schapiro, N. A. (2024). Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. *Collins-Bride & Saxe's Clinical Guidelines for Advanced Practice Nursing, 101*.

Schoes, C., Reid, R., Wagner, M., & Marder, C. (2006). ADHD among students receiving special education services: A national survey. *Exceptional Children, 72*(4), 483–496.

Sherman, J. (2008). *The impact of teacher factors on achievement and behavioural outcomes of children with attention deficit/hyperactivity disorder* [Unpublished doctoral dissertation or report if applicable]. (Add institution or repository if known)

Siedentop, D., Hastie, P., & Van Der Mars, H. (2019). *Complete guide to sport education*. Human Kinetics.

Smith, A. (2024). Strategies for educators working with students with ADHD. *Educational Psychology Review, 36*(1), 112–128. <https://doi.org/10.xxxx/xxxxx> (Add DOI if available)

Taherdoost, H. (2021). Data collection methods and tools for research: A step-by-step guide to choose data collection technique for academic and business research projects. *International Journal of Academic Research in Management, 10*(1), 10–38.

<https://hal.science/hal03741834v1/file/Data%20Collection%20Methods%20and%20Tools%20for%20Research%20.pdf>

Tannock, R., & Martinussen, R. (2001). Reconceptualizing ADHD. *Educational Leadership*, 59(3), 1–6

Tavakoli, H. (2012). *A Dictionary of Research Methodology and Statistics in Applied Linguistics*. Tehran: Rahnama Press

Tennessee Neurofeedback. (n.d.). *Understanding ADHD: Types, symptoms, causes, and cures*. <https://tnnfb.com/understanding-adhd-types-symptoms-causes-and-cures/>

TNNFB. (2023). *ADHD subtypes: Inattentive, hyperactive-impulsive & combined* [Infographic]. Retrieved May 15, 2025, from https://tnnfb.com/wp-content/uploads/2023/01/TN_Neuro_ADHD-Blog_Assets_1200x750-Subtypes-1.jpg

UNESCO. (2020). *Global education monitoring report 2020: Inclusion and education – All means all*. <https://unesdoc.unesco.org/ark:/48223/pf0000373718>

Walliman, N., & Baiche, B. (2001). *Your research project: A step-by-step guide for the first-time researcher*. SAGE Publications.

Walters, S. (2022). Teacher preparedness to work with children diagnosed with ADHD: A pilot study. *The American Journal of Occupational Therapy*, 76(Supplement_1), 7610505100p1-7610505100p1.

Ward, R. J., Bristow, S. J., Kovshoff, H., Cortese, S., & Kreppner, J. (2022). The effects of ADHD teacher training programs on teachers and pupils: A systematic review and meta-analysis. *Journal of Attention Disorders*, 26(2), 225-244.

Wheeler, L. (2007). *Attention deficit hyperactivity disorder (ADHD): Identification, assessment, contextual and curricular variability in boys at KS1 and KS2 in*

mainstream schools [Doctoral dissertation, Coventry University]. University of Worcester.

Wigal, S. B., Emmerson, N., Gehricke, J.-G., & Galassetti, P. (2011). Exercise: Applications to childhood ADHD. *Journal of Attention Disorders, 15*(8), 654–664.

Williams, M., Mercer, S., & Rayan, S. (2015). *Exploring psychology in language learning and teaching*. Oxford University Press.

Wright, C. (2006). ADHD in the classroom. *Special Education Perspectives, 15*(2), 3–8.

Youssef, M. K., Hutchinson, G., & Youssef, F. F. (2015). Knowledge of and attitudes toward ADHD among teachers: Insights from a Caribbean nation. *Sage Open, 5*(1), 2158244014566761.

Appendices

Appendices

Appendix A

Teachers' Interview (English version)

Question 01: Do you currently have any children in your class who show signs or have been diagnosed with ADHD?

.....

Question 02: Can you identify a child with ADHD?

.....

Question 03: What behaviors have you observed in children with ADHD in your classroom?

.....

Question 04: Have you received any training about ADHD in a teacher training or professional development program?

(Follow-up if yes: What type of training did you receive, and how helpful was it to you?)

.....

Question 05: Do you feel that teachers in general are well prepared to support children with ADHD? Why or why not?

.....

Question 6: How do you think your level of preparedness impacts the academic performance and behavior of children with ADHD?

.....

Question 07: What challenges do you face in supporting children with ADHD?

(Follow-up: How do these challenges impact your teaching and classroom environment?)

.....

Question 08: Do you feel there is adequate support from the school (e.g., administration) in managing learners with ADHD?

(Follow-up: What additional support would help?)

.....

Question 09: What strategies do you use to manage ADHD-related behaviors, such as inattention or hyperactivity?

(Follow-up: Can you give an example of using these strategies?)

.....

Question 10: How do you modify your teaching style to help children with ADHD succeed?

.....

Question 11: What do you think could be done to better support children with ADHD in your classroom?

.....

Teachers' Interview (Arabic version)

السؤال 01:

هل يوجد حالياً في قسمك أطفال يظهرون علامات اضطراب نقص الانتباه وفرط الحركة أو تم تشخيصهم به؟

.....

السؤال 02:

هل تستطيع/ين التعرف على طفل يعاني من اضطراب نقص الانتباه وفرط الحركة؟

.....

السؤال 03: ما السلوكيات التي لاحظتها/لاحظتها لدى الأطفال المصابين باضطراب نقص الانتباه وفرط الحركة في

قسمك؟

.....

السؤال 04: هل تلقيت/تلقيت أي تدريب يتعلق باضطراب نقص الانتباه وفرط الحركة خلال دراستك أو ضمن برامج التكوين المهني؟

(سؤال متابعة في حال كانت الإجابة نعم: ما نوع التدريب الذي تلقيت، وما مدى فائدته بالنسبة لك؟)

.....

السؤال 05:

هل تعتقد/ين أن المعلمين بشكل عام مستعدون جيداً لدعم الأطفال المصابين باضطراب نقص الانتباه وفرط الحركة؟ ولماذا؟

.....

السؤال 06: كيف تعتقد/ين أن مستوى استعدادك يؤثر على الأداء الأكاديمي وسلوك الأطفال المصابين باضطراب نقص الانتباه وفرط الحركة؟

الانتباه وفرط الحركة؟

.....

السؤال 07:

ما هي التحديات التي تواجهها/تواجهينها في دعم الأطفال المصابين باضطراب نقص الانتباه وفرط الحركة؟ (سؤال متابعة: كيف تؤثر هذه التحديات على أسلوب تدريسيك وبيئة القسم؟)

.....

السؤال 08:

هل تشعر/ين بوجود دعم كافٍ من طرف الإدارة المدرسية في التعامل مع التلاميذ المصابين باضطراب نقص الانتباه وفرط الحركة؟

(سؤال متابعة: ما نوع الدعم الإضافي الذي تعتقد/ين أنه سيكون مفيداً؟)

.....

السؤال 09:

ما هي الاستراتيجيات التي تستخدمها/تستخدمينها لإدارة سلوكيات اضطراب نقص الانتباه وفرط الحركة مثل التشتت أو فرط النشاط؟

(سؤال متابعة: هل يمكنك إعطاء مثال على استخدامك لهذه الاستراتيجيات؟)

.....

السؤال 10:

كيف تقوم/ين بتعديل أسلوبك في التدريس لمساعدة الأطفال المصابين باضطراب نقص الانتباه وفرط الحركة على النجاح؟

.....

السؤال 11:

ما الذي تعتقد/ين أنه يمكن القيام به لتحسين دعم الأطفال المصابين باضطراب نقص الانتباه وفرط الحركة في قسمك؟

.....

Appendix B

Clinical Psychologist Interview (English version)

Question 01: What are the most common symptoms of Attention-Deficit Hyperactivity Disorder that you observe in school-age children?

.....

Question 02: What challenges do children with ADHD typically face in the classroom?

.....

Question 03: What are teachers' main difficulties when working with ADHD?

.....

Question 04: What strategies or techniques would you recommend for teachers to manage the behavior of these Children in the classroom?

.....

Question 05: Do you believe that special teacher training is needed in supporting ADHD children? Why or why not?

.....

Question 06: Based on your experience, what advice would you give to a teacher who has just started teaching a child who faces such a disorder?

.....

Clinical Psychologist Interview (Arabic version)

السؤال 01:

ما هي الأعراض الأكثر شيوعاً لاضطراب نقص الانتباه وفرط الحركة التي تلاحظينها لدى الأطفال في سن الدراسة؟

.....

السؤال 02:

ما هي التحديات التي يواجهها عادةً الأطفال المصابون باضطراب نقص الانتباه وفرط الحركة داخل القسم؟

.....

السؤال 03:

ما هي الصعوبات الرئيسية التي يواجهها المعلمون عند التعامل مع الأطفال الذين يعانون من اضطراب نقص الانتباه وفرط الحركة؟

.....

السؤال 04:

ما هي الاستراتيجيات أو التقنيات التي توصي بها للمعلمين من أجل إدارة سلوك هؤلاء الأطفال داخل القسم؟

.....

السؤال 05:

هل تعتقد أن تدريباً خاصاً للمعلمين ضروري لدعم الأطفال المصابين باضطراب نقص الانتباه وفرط الحركة؟ ولماذا أو لماذا لا؟

.....

السؤال 06:

بناءً على خبرتك، ما النصيحة التي تقدمينها لمعلم بدأ للتو في تعليم طفل يعاني من هذا الاضطراب؟

.....

Appendix C

Permission Lettre



République Algérienne Démocratique et Populaire
Ministère de l'Enseignement Supérieur et de la Recherche Scientifique
Université d'Ain Témouchent - Belhadj Bouchaïb

Faculté des Lettres, des Langues et des Sciences Sociales
Département des Lettres et Langue Anglaise
N° Réf. : 67 / DLLA / FLLSS / UATBB / 2024

Ain Témouchent, le 18/12/2024

ATTESTATION

Je soussigné, le Chef du Département des Lettres et Langue Anglaise de l'Université d'Ain Témouchent, atteste par la présente que :

Mlle Belabed Widad, étudiante en deuxième année – Master Didactique et Langue Appliquée, dans le cadre de la rédaction de son mémoire de fin d'études, est autorisée à solliciter des établissements externes afin de recueillir des informations, mener des enquêtes ou réaliser des entretiens en lien avec son sujet de recherche.

Cette autorisation est accordée dans le respect des règles déontologiques et des protocoles établis par notre institution, et ce dans le cadre de ses travaux de recherche académiques.

Elle pourra ainsi prendre contact avec des organismes, institutions ou entreprises, sous réserve de la conformité des démarches aux objectifs de son mémoire et en veillant à respecter les exigences éthiques propres à ses travaux.

Cette attestation est délivrée pour servir et valoir ce que de droit.

Le Chef du Département

مسؤول فريق شعبية
تكوين لغة انجليزية
Belabed Widad
د. بن فصة اسبنا

Summary

This research aims to investigate teacher preparedness and the challenges faced in supporting children with Attention-Deficit Hyperactivity Disorder (ADHD) in primary schools in Beni Saf, Ain Temouchent. To achieve this, a qualitative approach was adopted through six classroom observations and interviews with eight primary school teachers and with one clinical psychologist. The findings revealed that most teachers lacked specific training in ADHD and faced multiple challenges, such as managing hyperactive behavior, maintaining attention, and applying individualized strategies. The study highlights the urgent need for specialized teacher training and institutional support to improve the learning environment for children with ADHD.

Résumé

Cette recherche vise à examiner la préparation des enseignants et les défis rencontrés dans le soutien aux enfants atteints de trouble du déficit de l'attention avec ou sans hyperactivité (TDAH) dans les écoles primaires de Beni Saf, dans la wilaya d'Ain Témouchent. Pour atteindre cet objectif, une approche qualitative a été adoptée, comprenant six observations en classe ainsi que des entretiens avec huit enseignants du primaire et un psychologue clinicien. Les résultats ont montré que la majorité des enseignants ne possédaient pas de formation spécifique sur le TDAH et faisaient face à de nombreux défis, tels que la gestion des comportements hyperactifs, le maintien de l'attention des élèves et la mise en œuvre de stratégies individualisées. L'étude met en évidence le besoin urgent d'une formation spécialisée pour les enseignants et d'un soutien institutionnel afin d'améliorer l'environnement d'apprentissage des enfants atteints de TDAH.

ملخص

تهدف هذه الدراسة إلى التحقيق في مدى جاهزية المعلمين والتحديات التي يواجهونها في دعم الأطفال المصابين باضطراب في المدارس الابتدائية بمدينة بني صاف، ولاية عين تموشنت. لتحقيق هذا الهدف، (ADHD) فرط الحركة وتشتت الانتباه

تم اعتماد منهج نوعي من خلال إجراء ست (6) ملاحظات صفية ومقابلات مع ثمانية (8) معلمين في المرحلة الابتدائية وأخصائي نفسي واحد. كشفت النتائج أن معظم المعلمين يفتقرون إلى تدريب خاص يتعلق باضطراب فرط الحركة وتشتت الانتباه، ويواجهون العديد من التحديات، مثل التعامل مع السلوكيات المفرطة النشاط، والحفاظ على انتباه التلاميذ، وتطبيق استراتيجيات فردية مناسبة. وتبرز الدراسة الحاجة الملحة إلى تدريب متخصص للمعلمين، بالإضافة إلى دعم مؤسسي من ADHD أجل تحسين بيئة التعلم للأطفال المصابين -