

Perception of Teachers on Students with Attention Deficit Hyperactivity Disorder (ADHD): A Sociological Investigation

OLADEJO Segilola Yewande¹ & ADENUGA Ademolu Oluwaseun² & ODUNIYI Ayomide Cynthia³

^{1,3} Department of Sociology, Faculty of Social Sciences, Olabisi Onabanjo University, Ago-Iwoye, Nigeria

² Department of Criminology and Security Studies, Faculty of Liberal Studies, Osun State University, Osogbo, Nigeria

Correspondence: OLADEJO Segilola Yewande, Department of Sociology, Faculty of Social Sciences, Olabisi Onabanjo University, Ago-Iwoye, Nigeria

Email: segilola.ogunyemi@oouagoiwoye.edu.ng

Doi: 10.23918/ijsses.v10i4p10

Abstract: Attention Deficit Hyperactivity Disorder (ADHD) has been discovered to be prevalent among children of school age, most especially in rural areas in developing countries, and Nigeria is not an exception. This study investigated, sociologically, the awareness level of some primary school teachers about students with attention deficit hyperactivity disorder (ADHD), the various challenges faced, and the coping mechanisms employed by the teachers to address the situation of students with ADHD in Ago-Iwoye, Nigeria.

The study was predicated on the Dynamic Developmental Theory (DDT) of Attention Deficit Hyperactivity Disorder (ADHD). The study was conducted in a rural community (Ago-Iwoye), which has limited basic infrastructural facilities. Being an exploratory study, data were collected through a qualitative instrument (an in-depth interview guide) designed by the researchers. Through purposive sampling, in-depth interviews were conducted with 18 respondents from two prominent primary schools with a large number of pupils with ADHD (Imere Primary School and Love Epistle Primary School) in Ago-Iwoye, Ogun State, Nigeria. The data was transcribed, and the content was analyzed.

Findings showed that teachers were unaware of what ADHD is but have had encounters with students who showed the symptoms at one point or another during their line of service. Also, the teachers were not aware of the professional treatment rendered to students with ADHD, thus facing several challenges dealing with such students and, as a result, treating pupils who passed through their classes like every other conventional educator.

The study concluded teachers had no knowledge of students with ADHD and merely treated their symptoms with unfounded judgment. The study recommended that special education experts be recruited in every educational institution to cater to children who experience ADHD and aid their socialization in the school environment.

Keywords: Perception, Attention Deficit Hyperactivity Disorder (ADHD), Teachers, Students, Sociological Appraisal

Received: Aug 21, 2023

Accepted: Sep 28, 2023

Oladejo, S. Y., Adenuga, A. O., & Oduniyi, A. C. (2023). Perception of Teachers on Students with Attention Deficit Hyperactivity Disorder (ADHD): A Sociological Investigation. *International Journal of Social Sciences & Educational Studies*, 10(4), 10-24.

1. Introduction

Universally, learning disabilities among children of school age have been an issue of concern, which has prompted much research to focus on the sources, nature, causes, processes, and ameliorations of such learning disabilities.

Ojionuka (2016) described learning disabilities as evolving from some disorders, which may be described as hyperactivity or hypoactivity depending on the categorization. Among the identified disorders that inhibit the process of learning among infants, adolescents, and teenagers, attention deficit hyperactivity disorder (ADHD) has gained momentum due to the avalanche of research concentration it has attracted from researchers globally and in Nigeria (Ekechukwu & Alor, 2018; Frankel, Gold & Ajodhia-Andrews, 2010; Lasisi, Ani, Lasebikan, Sheikh & Omigbodun, 2017; Vitanza, 2014). ADHD has been described by Bakola, Rizos, and Drigas (2019) as a persistent neurobehavioural disorder characterized by challenges in maintaining attention, excessive levels of physical activity, and impulsive behavior.

This condition impacts a significant number of children from birth and frequently continues to impair them throughout their adult lives (Alshehri et al., 2020; Vitanza, 2014). This mental condition is prevalent among children and is widely observed. The primary manifestations of ADHD encompass three core symptoms: inattention, hyperactivity, and impulsivity (Lawrence et al., 2017). Inattention implies the inability to sustain focus or concentration on tasks or activities, while hyperactivity is contextualized as entailing excessive and inappropriate motor activity that is incongruous with the immediate environment, and impulsivity, on the other hand, involves engaging in impulsive actions without prior contemplation or consideration. According to existing literature, the overall incidence of ADHD is projected to be 2.5% in adults and 8.4% in children (Wang et al., 2020). This makes it imperative to engage in empirical investigation on how the handlers of the children, most especially teachers, are aware of their ADHD status.

Ohki et al. (2023) have built on existing studies conducted in Europe, America, and Asia to empirically prove that ADHD is frequently detected and manifested by children experiencing such disorders throughout the school years, mostly via classroom disruption or difficulties in academic performance. The ongoing debates have shown that there is a higher prevalence of ADHD among boys in comparison to girls. This also requires that the African versus the Nigerian experience be considered in validating or invalidating this claim. Despite these ongoing revelations, it is increasingly arguable that a confluence of factors contributes to ADHD development, including genetics, brain function, and brain structure. This was affirmed by Bakola et al. (2019). Also, according to Bell et al. (2011), teachers are trained pedagogists who possess a moral and ethical responsibility to contribute to the optimal development of children by attentively observing significant indicators without engaging in discriminatory practices.

In Nigeria, however, it has been observed that teachers frequently attach a negative stigma to students with ADHD, thus displaying a tendency to adopt a negative perspective on the academic performance of these students. For instance, in the study conducted by Lasisi et al. (2017), it was deduced that several teachers possess an insufficient understanding of ADHD and its potential impact on the social and academic accomplishments of their students, regardless of its significant frequency coupled with its enduring impact on students in terms of academic underperformance, diminished self-worth, and challenges in social and

behavioral domains. Therefore, it is on this premise that teachers' comprehensive knowledge pertaining to ADHD be subjected to empirical investigation viz-a-viz the challenges confronting them while in contact with pupils with ADHD.

This is because children diagnosed with ADHD manifest distinct symptoms that distinguish them from their typically developing peers in a classroom setting. Moreover, the educational approach for these children is generally uniform, with the exception of instances where certain teachers demonstrate attentiveness and employ appropriate strategies and time allocation to effectively instruct children with disorders (Ogunyemi & Oladejo, 2019). According to Adegbiyi et al. (2017), this approach facilitates enhanced learning outcomes and fosters a stronger connection between the students and the subject matter being taught. The understanding of ADHD among teachers in Nigeria is essential not only for their capacity to attribute ADHD symptoms to interactions but also for their ability to adapt to individual student characteristics, establish appropriate expectations within the classroom setting, and foster positive interpersonal relationships. This, to a large extent, triggered interest in this current study.

1.1 Research Objectives

The objectives of this study were to assess the awareness level of the teachers regarding students with ADHD, examine the challenges teachers face with such students, and identify the coping strategies of teachers when dealing with students with ADHD in Ago-Iwoye, Nigeria.

2. Review of Relevant Literature and Theory

2.1 Empirical Review

Attention Deficit Hyperactivity Disorder (ADHD) is a disorder that is usually identified in infancy and frequently continues into adulthood. The probability of symptoms converging with developmental difficulties, such as delays in language acquisition, increases the likelihood of an incorrect diagnosis, making the identification of ADHD in young children challenging. Children with ADHD may struggle to maintain focus, control impulsive conduct, and exhibit higher levels of physical restlessness. Children's academic performance, social interactions, and general functioning may all be hampered by ADHD, which has been linked to a number of problems. Sir Alexander Crichton, a prominent physician from Scotland, laid the foundation for the discovery of ADHD in 1798. In contrast to their more focused colleagues, certain people tend to be more easily distracted and have a harder time maintaining their attention on tasks, astutely noted Crichton. Sir Georgic Fredrick examined the mental issues seen in children who are generally healthy and have normal capacity during a series of lectures in 1902. The aforementioned children exhibited higher levels of impulsivity and experienced difficulties in maintaining attention and self-regulation. Fifteen occurrences were observed in young males, while five cases were observed in girls. This aligns with the current understanding that there is a higher prevalence of ADHD diagnoses among boys compared to girls (Nolan et al., 2021).

Numerous scholars have conducted studies on teachers' perceptions of students with ADHD. A study by Adeosun et al. (2013) explored teachers' attitudes towards ADHD. The teachers for the Lagos State elementary schools were picked from four mainstream institutions. In addition to completing a questionnaire, participants were given vignettes depicting elementary school students with ADHD.

Responses from participants revealed a considerable prevalence of ADHD beliefs as well as frequent negative attitudes toward children diagnosed with the disorder. As a result, it's plausible to assume that primary school teachers in Nigeria have serious misconceptions concerning ADHD. This highlights the need for educational initiatives targeted at increasing teachers' understanding of ADHD. It is also recommended that primary teacher preparation courses incorporate mental health literacy into their curricula.

In order to investigate the opinions and acceptability of therapies among teachers, Vitanza conducted a research study in 2014. By examining the perspectives of schoolteachers on ADHD and their assessments of the numerous strategies used to meet the educational and behavioral needs of kids with ADHD, this study aimed to build on prior research. The findings showed that educators who obtain additional training on ADHD have better levels of confidence. A thorough understanding of ADHD and the inclusion of performance evaluation and effective communication in ADHD interventions appear to be essential for modifying instructors' perceptions of students with ADHD. Improving interactions between teachers and students with ADHD who are receptive to collaborative methods and lessening teachers' unfavorable attitudes towards students with ADHD can be achieved using these factors.

In the same vein, Jimoh (2014) investigated the knowledge and attitudes of primary school teachers in Lagos about ADHD. The study showed a statistically significant, albeit minor, beneficial association between teachers' comprehension and attitude toward ADHD students. The study discovered that age had no effect on primary school teachers' views and knowledge of these students. Furthermore, the findings reveal that while there are significant differences in knowledge between genders, there are no such differences in instructors' views about ADHD. From the findings, the degree of education also has a substantial effect on primary school teachers' beliefs about ADHD but has no effect on their behavior towards children with ADHD.

Ballantine (2015) equally investigated the association between educators' knowledge of ADHD and their perceptions of students who have been diagnosed with the disorder. This initiative's primary objective was to increase the participating school district's awareness of the various forms of professional development available to assist teachers in acquiring disease-specific knowledge. The subjects of this investigation were certified general and special education teachers from an Illinois suburban school district. It was discovered from the study that educators could benefit from professional development programs concentrating on the etiology of ADHD and the teacher's role in the diagnostic process.

Furthermore, Ojionuka (2016) conducted a study in Nigeria to examine Nigerian educators' awareness of ADHD and the classroom behavior management tactics they use with children diagnosed with ADHD. The study's goal was to look for statistically significant correlations between concepts that could be quantified. Furthermore, the author discovered that a significant number of Nigerian teachers lack the essential knowledge, resources, and special training to effectively execute pedagogical strategies to sustain the academic accomplishment of such students within educational settings. The presence of children exhibiting ADHD-related behavioral characteristics in school settings might disturb the learning environment. This disturbance has the potential to impair the effectiveness of teaching methods and jeopardize the entire class's academic, social, and developmental progress. It is worth noting that many

Nigerian educators have misconceptions about the typical behaviors associated with ADHD and may resort to punitive disciplinary measures when confronted with ADHD manifestations in the classroom.

Lawrence et al. (2017) also investigated instructors' experiences working with ADHD students. Teachers have an important role in developing strong connections among children and aiding successful learning. However, nothing is known about the nature of their relationships with young children. The study's methodological strategy of choice was a semi-structured interview. According to the findings of this study, participants learned about ADHD mostly through in-service or casual interactions rather than through formal educational channels. The teacher perspectives and ADHD classroom techniques were influenced by cultural and gender factors and were primarily derived from anecdotal experiences. The educators encountered feelings of shame and concern when navigating the demands of students, limitations imposed by the school system, and challenges arising from familial circumstances. The researcher's subsequent findings indicate that teachers have indeed cultivated appropriate coping strategies through informal channels. However, it is posited that formal education and assistance would enhance teachers' ability to effectively cater to the needs of pupils with ADHD.

Additionally, a study was done by Lasisi et al. (2017) to determine how an ADHD education course affected instructors comprehension of the disorder. An intervention group and a control group that waited were both included in the study's randomized controlled trial research design. A sociodemographic questionnaire was used to gather data on a variety of teacher traits, including age, gender, prior ADHD treatment, teaching experience, and credentials. The teachers who participated in this survey were asked to provide factual information. According to the author, 3–7% of school-aged children suffer from the common neurodevelopmental disorder. This means that in a class of 25 students, there will almost surely be at least one child who has been diagnosed with ADHD. A conclusion was drawn that the understanding and attitudes of teachers concerning ADHD can both advance following a single session of training for ADHD using a readily available training package. It is vital to look into how to include training on ADHD in teacher education programs and how to include it in continuing education for Nigerian teachers who already hold degrees.

Research on elementary teachers' knowledge, attitudes, and behavioral practices about ADHD was conducted by Khalil et al. in 2019 in an effort to determine the efficacy of educational interventions in enhancing primary school teachers' understanding of attitudes towards, and behavioral practices related to ADHD students. The study employed a one-group pre-post test as part of a quantitative quasi-experimental strategy to accomplish its objectives. The study's findings suggest that a quick professional education intervention can significantly raise teachers' understanding of ADHD, offering a practical and affordable solution to the knowledge gap between instructors and the ADHD condition. The teacher's knowledge of ADHD was limited, according to the study, but they had a decent comprehension of the general characteristics of ADHD. However, this study discovered that teachers' demographic features, such as age and teaching experience, had no statistically significant impact on their knowledge, attitudes, and behavioral practices. The only exception was among instructors who had already participated in in-service training when a substantial difference in knowledge and attitude was detected between pre-intervention and post-intervention levels.

The research project by Ewe (2019) summarises the most recent body of literature on the interactions between teachers and students who have been diagnosed with ADHD in the contexts of elementary, secondary, and high school education. According to the methodology utilized in this study, quantitative surveys are frequently used as a means of research in this particular field of study. According to the findings, children with ADHD tend to feel less connected to their teachers than their peers without the disorder, which is consistent with the teachers' perceptions. In contrast to interactions with children without ADHD, educators working with students who have been diagnosed with ADHD experience less emotional intimacy, less collaboration, and more conflict. Teachers' perceptions of children with ADHD pose a risk factor that can lead to academic underachievement, social exclusion, and peer rejection. These unfavorable encounters may then result in the emergence of poor self-esteem and loneliness.

Collectively, all these studies mentioned above have highlighted the significance of teacher training and education programs to increase awareness and attitudes about ADHD. They stressed the importance of considering cultural, geographical, and contextual factors when examining teacher perspectives on ADHD. In addition to highlighting the potential long-term benefits of such training, their findings emphasized the significance of ongoing support for instructors, as there is a need for more complete, multi-faceted therapies for students with ADHD that target not only teacher knowledge but also classroom management tactics and support networks. For instance, the study by Adeosun et al. highlighted the prevalence of misconceptions and negative attitudes among elementary school instructors in Lagos, Nigeria, and emphasized the significance of improving teachers' comprehension of ADHD through educational programs. The scope of the study, however, is limited because it centers solely on teachers in Lagos, Nigeria, and does not investigate cultural or geographical differences in ADHD perceptions. Vitanza et al. emphasized the significance of teacher training in shaping ADHD attitudes by illuminating the benefits of additional ADHD-specific training for educators but did not examine the long-term effects of such training or the challenges associated with implementing these strategies in actual classroom settings. Jimoh's study shed light on potential intervention areas, but the findings of the study regarding age, gender, and level of education may not reflect the complexities of teacher attitudes, and the small sample size may limit generalizability. Ballantine emphasized the relevance of professional development for teachers in comprehending ADHD, contributing to the larger debate on teacher education. However, the study was restricted to a single school district, and the efficacy of various professional development programs has not been extensively examined. Ojionuka accentuated Nigerian teachers' lack of understanding and training on ADHD and its probable impact on the learning environment with no pertinence to other regions or countries with distinct educational systems and cultural conditions. Lawrence et al. shed light on instructors' experiences and coping strategies when working with children with ADHD, but the findings may not be relevant to all educators, and the qualitative nature of the research hinders generalizability. Lasisi et al. employed a meticulously randomized controlled trial methodology to examine the impact of ADHD education on educators, but due to the study's emphasis on short-term effects, it may not reflect long-term changes in teacher attitudes or conduct. Khalil et al. demonstrated that brief professional education interventions improve teachers' comprehension of ADHD, while focusing on a single intervention may not account for potential heterogeneity in training content and duration-based effects. Lastly, Ewe investigated the interpersonal relationships between teachers and students with ADHD, shedding light on potential challenges confronted by both parties, but the study relied on

quantitative questionnaires, which may not convey the complexities of teacher-student relationships adequately.

The relevance of these studies cannot be overemphasized. However, additional research is necessary to provide a comprehensive understanding of the complex interactions between teachers, students, and ADHD in a variety of cultural and educational contexts. This holds significant importance in relation to the ongoing inquiry that is now being conducted.

2.2 Theoretical Framework

The theoretical framework of this study is predicated on the Dynamic Developmental Theory (DDT) of Attention Deficit Hyperactivity Disorder (ADHD), which is a prevalent psychiatric condition characterized by neurodevelopmental impairments. A significant portion of the scientific investigation pertaining to ADHD has mostly concentrated on two key domains, namely the genetic factors underlying the condition and the cognitive and behavioral symptoms associated with it. The diagnosis relies on the classification of symptom manifestation, specifically pertaining to impulsivity, hyperactivity, and inattentiveness.

The Dynamic Developmental Theory (DDT) of ADHD was explained by Sagvolden et al. (2005) and has gone through a comprehensive review process in recent times. This all-encompassing hypothesis aims to elucidate the behavioral aspects of ADHD. The foundation of this theory is mostly supported by empirical data derived from the theoretical framework of behaviorism. According to the idea, a key explanation for numerous symptoms associated with ADHD can be attributed to two primary behavioral mechanisms: modified reinforcement of new behavior and impaired extinction of inappropriate behavior. The foundation of this theory is rooted in the temporal interval between the occurrence of a stimulus and the subsequent reinforcement of the response. There exists a hypothesis suggesting that in individuals with ADHD, the temporal period during which a reinforcer can effectively exert its influence is shorter compared to typically developing children. According to Nejati et al. (2021), the absence of timely reinforcement for socially desirable behavior culminates in the manifestation of numerous symptoms associated with ADHD. Dynamic Developmental Theory has included a number of concepts from the body of prior research on delay aversion and executive dysfunction. These theories generally center on behavioral organization issues, attentional inadequacies, difficulties developing non-declarative habits, and aversion to delays. In the context of DDT, these ideas are put forward as further hypotheses.

The ideas of hyperactivity, impulsivity, and inattention are presented from a theoretical standpoint in the Diagnostic and Statistical Manual of Mental Disorders (DDT). Multiple reasons could possibly result in the development of hyperactivity. These factors include a reduced delay-of-reinforcement gradient, which results in insufficient reinforcement of appropriate behavior; a failure to eliminate ineffective or inappropriate responses, which causes a relative increase in their occurrence; and an inability to suppress or extinguish excessive responses (Van der Oord & Tripp, 2020). The short delay-of-reinforcement gradient is a phenomenon that has been linked to the onset of impulsivity. In this occurrence, the reinforcement offered for appropriate behavior is insufficient, and immediate reinforcement is more significant than delayed reinforcement. Two factors that contribute to behavioral variability are a greater diversity of response types and a weak extinction mechanism, which results in a greater frequency of

incorrect responses. Those with ADHD and those without it have fundamentally different biological bases, including inherited factors and prenatal environmental influences. In addition, the neuronal modulation associated with this disorder may be affected by the temporal progression of ADHD symptoms and the ongoing influence of environmental factors, such as education and life experiences. In the same vein, Fadus et al. (2020) believe that exposure to potentially harmful environmental variables, such as trauma, neglect, or inconsistent parenting during pregnancy, may increase a child's risk of developing symptoms of ADHD. Babies born to mothers who smoked during their pregnancies, for instance, might be more prone to hyperactivity and inattention. ADHD symptoms in children may also be significantly influenced by their school experience. For children with ADHD, traditional classroom settings, with their emphasis on rote learning and demanding teaching approaches, may be more problematic. According to Ziegler et al. (2016), peer contact is essential for a child to grow, so feelings of loneliness and low self-worth may be exacerbated by social challenges in teenagers with ADHD. Children with ADHD symptoms might be better managed by parents who provide them stability, discipline, and emotional support. When children from low-income households have access to healthcare and receive a timely diagnosis, they are able to circumvent obstacles that could delay the diagnosis and treatment of ADHD. Comprehending and regulating these environmental factors is essential for a comprehensive approach to ADHD management and assistance.

3. Methodology

This study was conducted in two schools in Ago Iwoye, Ogun State, Nigeria: Imere Primary School and Love Epistle Primary School, because the schools accounted for most pupils with ADHD in the study area with such peculiarities in the state. The population of this research included all the teachers in both schools, giving a total of twenty-two (22) teachers as the sample size (10 teachers from Love Epistle and 12 teachers from Imere Primary School). The respondents were purposely selected because of the peculiarities of the schools. Although the study intended to incorporate all the teaching staff, four (4) of the proposed participants were unwilling to participate in the study for personal reasons after being told the nature and essence of the study, and their decision was respected. Also, the study protected the original identities of the participants because many chose to be anonymous. As a result, the study was conducted with 18 teachers from both schools. Data was collected using a structured interview, which consisted of the socio-demographic data, affective, cognitive, and psychomotor activities of the pupils, as well as the teachers' specialisation, years of experience, method of teaching and interacting with the pupils, and their challenges identified. The data was transcribed, content analysed, and presented in tables.

4. Results

4.1 Socio-Demographic Characteristics Of The School Teachers

The table below shows the socio-demographic information of the eighteen (18) respondents who were particularly chosen for the interviews from each of the primary schools included in the study. Two (2) of the interviewees were between the ages of 35 and 39, three (3) were between the ages of 40 and 44, two (2) were between the ages of 45 and 49, six (6) were between the ages of 50 and 54, three (3) were between the ages of 55 and 59, and two were 60 or older. The sex breakdown reflected 14 female participants and 4 male individuals. One respondent had a master's degree (MSc), seven had a bachelor's degree, a high

school diploma, or a higher degree, and ten (10) still considered their finest educational achievement to be an NCE. Their years of experience indicated that six (6) teachers have been working for less than 10 years in service, ten (10) teachers have been teaching between 10 and 20 years, and only two teachers have been teaching for more than 20 years. This showed that the majority of the respondents have spent an average of 10 years teaching students.

Table 1: Socio-demographic characteristics of the school teachers

S/N	Gender	Age	Highest Educational Degree	Years of experience	Religion	School
1	Female	52	NCE	15years	Christian	Love Epistle primary school
2	Female	55	NCE	16years	Christian	Imere primary school
3	Female	39	NCE	3years	Christian	Imere primary school
4	Female	56	NCE	15years	Muslim	Imere primary school
5	Female	62	BSC	33years	Christian	Love Epistle primary school
6	Female	49	NCE	12years	Christian	Love Epistle primary school
7	Male	51	NCE	18years	Christian	Love Epistle primary school
8	Female	50	MSC	15years	Christian	Love Epistle primary school
9	Female	43	NCE	14years	Christian	Love Epistle primary school
10	Female	61	B.E.D	34years	Christian	Love Epistle primary school
11	Female	48	NCE	15years	Christian	Imere primary school
12	Female	35	HND	2years	Christian	Imere primary school
13	Female	55	BSC	15years	Christian	Imere primary school
14	Female	40	BSC	5years	Christian	Imere primary school
15	Male	42	BSC	5years	Christian	Imere primary school
16	Male	50	BSC	7years	Muslim	Love Epistle primary school
17	Female	51	NCE	11years	Christian	Love Epistle primary school
18	Male	54	NCE	9years	Christian	Imere primary school

Source: Authors (2023)

Theme: Perception of Teachers on Students with Attention Deficit Hyperactivity Disorder (ADHD)

The perception of teachers was measured in terms of their awareness level, the challenges they face, and the treatment they receive.

Category 1: Awareness Level

Based on the research conducted on the awareness level of teachers towards students with attention deficit hyperactivity disorder, the result showed that 66.7 percent of the interviewees were unable to define what ADHD is, but with the aid of examples such as a student being unable to sit still in class or a student's attention being diverted in class, they were able to identify some students in their classes with such behavioral symptoms. The result further showed that only 27.8 percent of the respondents have had training on students exhibiting symptoms of ADHD as provided by their school authorities, but they did no further research on it by themselves. The students with ADHD, according to 79 percent of the respondents, were not up to half of the students in their class, and the highest number of those with the symptoms were not more than five. Fifty percent of the teachers also identified that the boys exhibited more of the symptoms than the girls.

...no I haven't heard about ADHD and this is even my first time hearing about such a thing but with the examples you have shown me, I have two to five students with such behaviors in my class.

(IDI/Female/39yrs/I.M.S/NCE/3years)

..some of them do not focus in class because they might not have eaten before coming to school which makes them lose their focus in class because they are thinking of what to eat and there are majorly boys than girls, close to three boys, 2 girls in my class.

(IDI/Female/56yrs/L.E.P.S/NCE/15years)

Category 2: The Challenges Teachers Encounter

61.1 percent of the teachers stated that they had challenges with students with Attention Deficit Hyperactivity Disorder (ADHD) due to their lack of focus (not paying attention to what they are being taught in the classroom), hyperactivity (they are always eager to know what will happen next), and inattentive behavior they display, which mostly slow down their teaching. In an attempt to carry all the students along, they keep going back to re-explain what they have already taught them. At least five respondents (27.8 percent) do raise their voices to draw back the student's attention to what she is teaching, while 41.2 percent indicated that they do not shout at the students, but rather correct them calmly. Also, the respondents stated that they do not send the students out of the class whenever they disrupt their class activities. Probing further, it was realized that the students with symptoms of ADHD socialize well among their peers and also engage in social curriculum activities such as sports and debate, as explained by 89.3 percent of the interviewees.

...whenever I am teaching them, I do ask if they understand, if they don't understand, I have to re-explain it to them so that they will understand. It is not easy to be drawn back. Sometimes I have to start from the beginning because they were busy with something else.

(IDI/Female/62yrs/BSC/I.P.S/33years)

...some of them are on average but maybe one or two of them are intelligent and even go as far as teaching the other students when they don't understand. But it takes so much effort from me as the teacher. Sometimes I don't have the patience

(IDI/Female/61yrs/B.E.D/L.E.P.S/34years)

Category 3: Treatments Rendered by the Teachers

The respondents also reported various treatments rendered to the students. One of the treatments is to report them to the higher authorities. 91 percent of the respondents reported that once the students' behavior is out of their control despite using all the methods they know to condone it, they go ahead and report such students to the headmaster and the proprietor. Some of the respondents (39.8 percent) reported that they would go ahead and report the child to their parents when they come and pick them up during closing hours. A few respondents (22.2 percent) stated that they do praise the students whenever they get their classwork correctly in class, while some of the respondents allow the students to spend extra time discussing with them during the break time in an effort to create a conducive learning environment and to encourage every member of the class. Further reports showed that some of the teachers (44.4 percent) go as far as changing their teaching methods given to them by the school authorities just to incorporate a simpler form to enable the students with ADHD to understand the topic better.

.. after noticing the students' behavior for a while and it doesn't change, I go ahead and report to the proprietor, who will later call their parents to caution such a child.

(IDI/Male/54yrs/I.P. S/NCE/9years)

... sometimes I have to go down to their level to teach them. For example, I use cherry (agbalumo) seeds brought by the students to teach them by subtracting and adding the seeds together, which helps them understand mathematics better.

(IDI/Female/49yrs/L.E.P.S/NCE/12years)

5. Discussion of Findings

The sociodemographic characteristics of the school teachers provide a framework for understanding the potential influence of age, gender, educational background, and years of teaching experience on the study's objectives, which included determining the teachers' coping mechanisms, examining the challenges they face, and assessing their awareness of students with ADHD. how these traits could affect their understanding of ADHD, the challenges they confront, and the coping techniques they employ.

According to the findings, 77.8 percent of those who participated in the 14 interviews were between the ages of 40 and 59. This is optimal for the study because, compared to their younger counterparts, older teachers would have had different exposures to information about ADHD and may hold different attitudes and perspectives. Adegbiji et al. (2017) found that more seasoned educators may have been exposed to ADHD pupils for a longer period of time, possibly resulting in enhanced comprehension. They might, however, base their coping strategies on outdated information or sincerely held beliefs about ADHD. The study found that the majority of interviewees (83.3 percent) were females, which is consistent with the situation in most elementary schools in Nigeria, where women outnumber males. It also illustrates the distribution of gender among Nigerian elementary school instructors. This validates the findings of Nolan et al. (2021) that female teachers may approach ADHD education differently than male teachers. 55.5 percent of those interviewed hold a Nigerian Certificate of Education (NCE). This is due in part to the fact that in Nigeria, working as a trained and qualified teacher requires a bachelor's degree. Their educational history may also influence their ability to recognize ADHD and gain access to essential resources or training. According to Ekechukwu and Alor (2018), instructors with advanced degrees, such as master's or bachelor's degrees, may have been exposed to more educational psychology and child development theories, which may have increased their awareness and coping skills regarding ADHD. According to the findings, the majority of respondents (66.6 percent) had taught children for an average of ten years. This demonstrates that the length of a teacher's career may influence their experience with ADHD and capacity to acquire suitable coping methods. Furthermore, Oke et al. (2019) maintained that less-experienced instructors would be unable to work with ADHD pupils and would require additional support and training. Those with extensive teaching experience, on the other hand, may have developed coping strategies based on real-world occurrences.

On the awareness level of the teachers concerning students with ADHD, the study found that teachers lacked an understanding of attention deficit hyperactivity disorder (ADHD) in children. However, when provided with information about the symptoms of ADHD, they recognized its presence among some students. This indicates that there is still room for improvement in teachers understanding of ADHD. These findings support research conducted by Aly et al. (2015), Guerra et al. (2017), and Alshehri et al. (2020), which also highlighted a gap in teachers' knowledge about ADHD in primary schools.

Regarding the challenges faced by teachers when teaching students diagnosed with ADHD, it was discovered that many teachers felt the need to review previously taught material to adapt their teaching methods to meet these students' needs and sometimes provide instruction outside school hours tailored to their specific requirements. This observation aligns with the conclusions drawn by Rogers et al. (2015) and Ewe (2019), who posited that teachers struggle to connect emotionally and foster collaboration with students diagnosed with ADHD compared to those without this diagnosis. The inadequate understanding of ADHD among teachers can also contribute to these difficulties. As a result, they struggle to tackle the academic difficulties that arise in children diagnosed with the disorder.

Finally, all the teachers confirmed using a variety of strategies to address students diagnosed with ADHD, including providing guiding administrations, informing the school principal or parents, designating additional opportunities for individual consideration, and fostering a desire for reading. According to them, these strategies facilitate efficiency when managing students with ADHD. This supports the findings of

Bakola et al. (2019) and Klapproth et al. (2020) that teachers use different strategies to manage students with ADHD. These strategies include maintaining an optimistic outlook, demonstrating self-control, providing support, being sensitive to the children's emotions, and providing positive feedback.

6. Conclusion

Regarding the level of awareness of teachers of students with ADHD, the study concluded that the teachers' discernment is essential for differentiating children with ADHD, as they can only act based on what they know. Teachers struggled to manage children with ADHD and devised diverse strategies to deal with them. Teachers should, therefore, be more aware of the problems associated with ADHD in children in order to meet the educational requirements of these students. In order to assist the adaptation of students with ADHD, primary schools should hire a teacher who possesses specialized training on a customized curriculum. Also, educating people, particularly parents, about the concerns and the medications that can be used to treat them, is necessary to increase awareness of ADHD and other prevalent disorders in children, such as autism. The findings of this study showed implications for continued lack of understanding on how to proceed with exposure regarding school issues like this in Nigeria. First, the sample size was a limitation in this study. Although the response rate was high, the overall sample was small compared to the population of primary school students in Nigeria thus the result cannot be generalized. Secondly, the issue of anonymity did not allow some participants to divulge more information on the issue at hand thus creating limited responses. Finally, the duration of the study was cut short due to time and resource constraints. Expanding the study to include more schools, having a longer duration with more suitable resources, and maintaining strict confidentiality will help to produce a more satisfactory outcome for the country.

References

- Adegbiyi, W. A., Aremu, S. K., & Laisi, O. A. (2017). Ear, nose, and throat disorders in a Nigerian rural community. *Journal of the Scientific Society*, 44(3), 126-129.
- Adeosun, I., Ogun, O., Fatiregun, O., & Adeyemo, S. (2013). The attitude of Nigerian primary school teachers to children with attention deficit hyperactivity disorder. *European Psychiatry*, 28, 1-12 [https://doi.org/10.1016/S0924-9338\(13\)76428-9](https://doi.org/10.1016/S0924-9338(13)76428-9)
- Alshehri, A. M., Shehata, S. F., Almosa, K. M., & Awadalla, N. J. (2020). School teachers' knowledge of attention-deficit/hyperactivity disorder—Current status and effectiveness of knowledge improvement program: A randomized controlled trial. *International Journal of Environmental Research and Public Health*, 17(15), 5605-5619
- Aly, S. E., Mohammed, F., & Ahmed, Z. (2015). Teachers' perception and attitudes toward attention deficit hyperactivity disorder in primary schools at Assiut city. *Al-Azhar Assiut Medical Journal*, 13(4), 165-173.
- Bakola, L. N., Rizos, N. D., & Drigas, A. S. (2019). ICTs for emotional and social skills development for children with ADHD and ASD co-existence. *International Journal of Emerging Technologies in Learning*, 14(5), 122-131
- Ballantine, C. (2015, August 16). Teacher knowledge and perception of students with an ADHD label. *All Capstone Projects*. <https://opus.govst.edu/capstones/113>

- Bell, L., Long, S., Garvan, C., & Bussing, R. (2011). The impact of teacher credentials on ADHD stigma perceptions. *Psychology in the Schools, 48*(2), 184-197.
- Ekechukwu, R., & Alor, U. O. (2018). Teachers' strategies for management of Attention Deficit Hyperactivity Disorder (ADHD) among primary school pupils in Obio-Akpor LGA of Rivers State, Nigeria. *Educational Research International Vol.7*(3), 35-42
- Ewe, L. P. (2019). ADHD symptoms and the teacher-student relationship: A systematic literature review. *Emotional and Behavioural Difficulties, 24*(2), 136-155.
- Fadus, M. C., Ginsburg, K. R., Sobowale, K., Halliday-Boykins, C. A., Bryant, B. E., Gray, K. M., & Squeglia, L. M. (2020). Unconscious bias and the diagnosis of disruptive behavior disorders and ADHD in African American and Hispanic youth. *Academic Psychiatry, 44*, 95-102.
- Frankel, E. B., Gold, S., & Ajodhia-Andrews, A. (2010). International preschool inclusion: Bridging the gap between vision and practices. *Young exceptional children, 13*(5), 2-16.
- Guerra, F., Tiwari, A., Das, A., Cavazos Vela, J., & Sharma, M. (2017). Examining teachers' understanding of attention deficit hyperactivity disorder. *Journal of Research in Special Educational Needs, 17*(4), 247-256.
- Jimoh, M. (2014). Knowledge and attitudes towards attention deficit hyperactivity disorder among primary school teachers in Lagos State, Nigeria. *Advances in Life Science and Technology, 23*(9), 7-16
- Khalil, A. I., Alshareef, F. A., & Alshumrani, H. G. (2019). Knowledge, attitude, and behavioural practice of elementary teacher of ADHD children: Impact of an Educational Intervention. *American Journal of Nursing, 8*(6), 329-41.
- Klapproth, F., Federkeil, L., Heinschke, F., & Jungmann, T. (2020). Teachers' experiences of stress and their coping strategies during COVID-19 induced distance teaching. *Journal of Pedagogical Research, 4*(4), 444-452.
- Lasisi, D., Ani, C., Lasebikan, V., Sheikh, L., & Omigbodun, O. (2017). Effect of attention-deficit-hyperactivity-disorder training program on the knowledge and attitudes of primary school teachers in Kaduna, North West Nigeria. *Child and Adolescent Psychiatry and Mental Health, 11*(1), 1-8.
- Lawrence, K., Estrada, R. D., & McCormick, J. (2017). Teachers' experiences with and perceptions of students with attention deficit/hyperactivity disorder. *Journal of Pediatric Nursing, 36*, 141-148.
- Nejati, V., Sarraj Khorrami, A., & Nitsche, M. A. (2021). Transcranial direct current stimulation improves reward processing in children with ADHD. *Journal of attention disorders, 25*(11), 1623-1631.
- Nolan, C., Murphy, C., & Kelly, M. (2021). Using the IRAP to Investigate Gender Biases Towards ADHD and Anxiety. *The Psychological Record, 1*-7.
- Ogunyemi, S.Y. and Oladejo, O.A. (2019). Influence of gender and religion on prevalence of social phobia among in-school adolescents. *Gender and Behaviour, 17*(4), 14442 – 1444
- Ojionuka, A. N. (2016). *Nigerian educators' Attention Deficit Hyperactivity Disorder knowledge and classroom behavior management practices* [Doctoral dissertation, Walden University]. <https://scholarworks.waldenu.edu/dissertations/2224/>

- Oke, O. J., Oseni, S. B., Adejuyigbe, E. A., & Mosaku, S. K. (2019). Pattern of attention deficit hyperactivity disorder among primary school children in Ile-Ife, South-West, Nigeria. *Nigerian Journal of Clinical Practice*, 22(9), 1241-1251.
- Rogers, M., Bélanger-Lejars, V., Toste, J. R., & Heath, N. L. (2015). Mismatched: ADHD symptomatology and the teacher–student relationship. *Emotional and Behavioural Difficulties*, 20(4), 333-348.
- Sagvolden, T., Johansen, E. B., Aase, H., & Russell, V. A. (2005). A dynamic developmental theory of Attention-Deficit/Hyperactivity Disorder (ADHD) predominantly hyperactive/impulsive and combined subtypes. *Behavioral and Brain Sciences*, 28(3), 397-418.
- Van der Oord, S., & Tripp, G. (2020). How to improve behavioral parent and teacher training for children with ADHD: Integrating empirical research on learning and motivation into treatment. *Clinical Child and Family Psychology Review*, 23(4), 577-604.
- Vitanza, B. S. (2014). *Attention-Deficit Hyperactivity Disorder: teachers' perceptions and acceptability of interventions*. PCOM Psychology Dissertations. 315
https://digitalcommons.pcom.edu/psychology_dissertations/315
- Wang, C., Li, K., Seo, D. C., & Gaylord, S. (2020). Use of complementary and alternative medicine in children with ADHD: Results from the 2012 and 2017 National Health Interview Survey. *Complementary Therapies in Medicine*, 49, 102352-102378
- Yde Ohki, C. M., Walter, N. M., Bender, A., Rickli, M., Ruhstaller, S., Walitza, S., & Grünblatt, E. (2023). Growth rates of human induced pluripotent stem cells and neural stem cells from attention-deficit hyperactivity disorder patients: a preliminary study. *Journal of Neural Transmission*, 130(3), 243-252.
- Ziegler, S., Pedersen, M. L., Mowinckel, A. M., & Biele, G. (2016). Modeling ADHD: A review of ADHD theories through their predictions for computational models of decision-making and reinforcement learning. *Neuroscience & Biobehavioral Reviews*, 71, 633-656.