

Educators' Knowledge of and Attitudes Towards Autism Spectrum Disorder Among Primary School Pupils in Ekiti State, Nigeria

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ABSTRACT	ARTICLE DETAILS
This study aimed at examining the knowledge and attitudes of teachers in mainstream primary schools towards autism spectrum disorder among pupils in Ekiti State, Nigeria. Previous Nigerian research had broadly surveyed teachers' awareness, however this investigation specifically focuses on foundational primary school educators—the crucial frontline for early childhood developmental tracking—and pairs baseline knowledge assessments with attitudinal measurements. Adopting a descriptive survey design, a twenty-item questionnaire, "Teachers' Knowledge of and Attitude towards Autism Spectrum Disorder" (TKAASD), was utilized to collect data from one hundred and twenty (120) randomly selected public primary school teachers across twenty schools. Three distinct research questions guided the analysis, utilizing mean and standard deviation. The results revealed significant deficits in formal professional training and baseline preparation ($M = 1.34$, $SD = .468$), which directly mirrored predominantly negative underlying attitudes ($M = 1.46$, $SD = .468$) and a low sense of pedagogical efficacy ($M = 1.28$, $SD = .430$). Based on these findings, it was recommended that the Ekiti State Ministry of Education implement targeted, compulsory inservice training and localized sensitization campaigns specifically tailored to primary school settings to transition educators from punitive behavioral attributions to adaptive classroom interventions. KEYWORDS: Autism Spectrum Disorder, Primary school pupils, Teachers' Knowledge, Teachers' Attitudes, Ekiti State, Nigeria.	Published On: 26 August 2026 Available on: https://irijsh.com/

1. INTRODUCTION

A significant proportion of primary school children experience academic and developmental difficulties attributed to diverse underlying factors. Among the most prominent of these are specific learning disorders, intellectual disabilities, or neurodevelopmental conditions. One of such conditions may be developmental disorders including autism. Autism disorder is a condition often dismissed among school children by many school teachers because its manifestation in children varies. Depending on the severity of the condition, students with autism spectrum disorder may either achieve academically and socially or not at all. Autism or its clinical name, autism spectrum disorders (ASDs), is a complex disorder involving specific development of the neurological system and it is a lifelong condition. Although billions of dollars have been spent on research, the cause of this disorder is still unknown (Newschaffer et al., 2006; Rao & Gagie, 2006; Huang & Wheeler, 2006). Autism is a global health crisis that knows no borders, it does not discriminate based on nationality, ethnicity or social status (Adeola, 2025; Perko & McLaughlin, 2002). Autism Spectrum Disorder (ASD) could be described as a neuro-developmental disorder characterised by persistent deficits in social communication and social interaction, including a lack of imaginative ability and play, restricted and repetitive patterns of behaviour, interests, or activities (USDE, 2001). In countries around the world, scientists and researchers scramble to draw educators, physicians and all related specialists of many global industries to the need for research, proven curricula and related support necessary to guide, encourage and meaningfully educate in-school students with autism. The disorder has a global prevalence of 0.62%, while in Nigeria, and especially in Ekiti State, according to studies investigating ASD among children in Nigeria, autism exists within the population, but is often undiagnosed or misdiagnosed (Adeola, 2025; Adeosun et al., 2017). However, ASD is associated with enormous burdens globally, to a far greater extent than that which occurs with other childhood disabilities.

To construct an effective inclusive educational environment for children with autism, classroom practitioners must possess basic behavioral management skills, diagnostic familiarity, and adaptive pedagogical competence (Simpson, 2004). Limited structural understanding of ASD acts as the single most restrictive barrier to successful mainstream classroom inclusion, often causing general

educators to harbor stereotypical or significantly deficient definitions of the disorder (Sansosti & Sansosti, 2012). This systemic vulnerability is closely mirrored in broader African regional contexts; for instance, Omotayo, Auta, Akinyemi, and Dennis (2020) investigated the baseline knowledge of autism spectrum disorder among general educators within Ekiti State, revealing that an overwhelming majority of teachers lacked formal training, which significantly impaired their clinical recognition of the disorder. Similarly, investigations into Tanzanian regular primary schools show that an acute shortage of regular in-service seminars leaves foundational teachers ill-equipped to manage the overt behavioral modifications required by pupils on the spectrum (Edward, 2015). Even within structurally diverse systems like South Africa, mainstream primary educators struggle significantly with early screening tools, leading to late-stage diagnoses that worsen long-term developmental complications (Segeren, 2023). Consequently, general active primary educators consistently exhibit minimal preparation regarding classroom modifications, frequently operating under the flawed assumption that only highly specialized clinicians can manage students on the spectrum (Barned et al., 2011; Segall & Campbell, 2012).

Extant regional literature within southwestern Nigeria has begun exploring this domain but a critical empirical and contextual gap remains unresolved (Omotayo et al., 2020). Prior studies heavily aggregate general teacher cohorts without isolating the foundational tier of the educational system: mainstream public primary school educators. Primary school teachers occupy a unique developmental position; they represent the frontline of early childhood observation where prompt intervention is most efficacious. Because intensive behavioral therapies lose clinical potency as a child ages, identification during primary schooling is paramount for long-term prognosis and intellectual development (Filipek et al., 1999). Furthermore, simply measuring generic "awareness" is insufficient for altering classroom outcomes. There is a critical requirement to understand how a primary teacher's baseline knowledge directly influences their attitudinal posture and practical intervention beliefs. When teachers lack formal training, their attitudes dwindle, often leading them to misattribute clinical manifestations—such as speech delays or self-regulatory disruptions—to willful academic defiance or poor discipline (African Network for the Prevention and Protection against Child Abuse and Neglect, 2007; Bakare et al., 2008). To significantly advance beyond previous studies, this research introduces a multi-dimensional inquiry. It goes beyond nominal awareness to explicitly measure the emotional and pedagogical attitudes of primary educators in mainstream primary schools regarding autism spectrum disorder among school children in Ekiti State, Nigeria.

Current literature addressing the management of childhood autism and other developmental disorders advocates a multidisciplinary approach (Browder, 1983; Holt & Bouras, 2002; Gadia & Tuchman, 2003) which includes involving the children and their parents. This multidisciplinary approach incorporates behavioural therapy, communication and social skill training and management of disruptive behaviour with psychotropic medications when indicated (Volkmar & Klin, 2000). Also, child rights law that protects the interests of children with childhood autism and other developmental disorders is essential to ensuring that the rights of children with developmental disorders in this environment are not compromised, as advocated by the 1991 African Charter and the 1990 United Nations Convention on the Rights of the Child (UNESCO, 2002). The child rights which include the right to health, education, special care among others need to be preserved and respected. In China, a survey was carried out on Teachers' Knowledge and Attitude towards Children with Autism Spectrum Disorder by Liu et al. (2016). A total of four hundred and seventy-one pre-school teachers in the cities of Guangzhou and Foshan, China completed a questionnaire assessing participants' demographics, knowledge of typical child development and knowledge of ASD, attitude toward ASD, practices and self-perception of efficacy in the education of children with ASD and awareness of organisations and intervention approaches devoted to the care of individuals with ASD. The correlation between individual and school-level variables with current knowledge of typical child development and ASD was examined using univariate and multivariate analyses. The majority (84%) of participants answered correctly more than half of the questionnaire items assessing understanding of typical child development. In contrast, 83% provided inaccurate responses to more than half of the questionnaire items assessing knowledge of the ASD. Knowledge of typical child development and knowledge of ASD were both associated with geographic region. Teachers in Guangzhou had greater knowledge than those in Foshan ($p < 0.0001$). Knowledge of ASD was also associated with a higher education level ($p < 0.05$) and school type ($p = 0.023$). In general, participants believed fairly strongly in the need for greater service provision for children with ASD, and were receptive towards receiving additional specialised training. Most participants were unaware of ASD-specific organisations and empirically validated intervention approaches (Adeola, 2025).

Knowledge and awareness about childhood autism is low among healthcare workers working at community level in healthcare centres in Nigeria (African Network for the Prevention and Protection against Child Abuse and Neglect, 2007; & Bakare et al., 2008; Odejide et al., 2002; Oshodi et al., 2017). Knowledge and awareness among teachers have not been given attention, which could be a reason for teachers tagging the students as not learning. Adequate knowledge and awareness about childhood autism among healthcare workers and teachers is highly necessary as this would ensure early diagnosis of children with autism in the community and in turn would allow early interventions which have been shown to improve prognosis in children with autism (Filipek, et al., 1999). Gray (2001) and Rhoades et al. (2007) had earlier noted that healthcare workers' knowledge or lack of knowledge about autism spectrum disorders (ASD) greatly influences the average age of diagnosis and whether the healthcare

worker concerned provides further information necessary to caregivers about autism or not, both of which greatly impact the overall prognosis in children with ASD.

However, interventions are available, and can be quite efficacious when applied early in development, leading to improved social communication and social interaction, and even increased IQ scores. Prompt intervention is crucial since intensive behavioural interventions may have diminished effectiveness in older children. The implementation of intervention in young children rests upon disorder identification. As such, diagnosis at younger ages plays a crucial role in prognosis and developmental outcomes. This condition is relatively new in Nigeria and many school teachers do not have the required knowledge of autism, hence attitudes towards such children dwindle. Based on the aforementioned, this study aims at delving into mainstream primary school teachers' knowledge of and attitude towards autism spectrum disorder among primary school children in Ekiti State of Nigeria.

THEORETICAL FRAMEWORK

A number of theories, behavioural, biological, and genetic, have been proposed to explain the etiology of autism. These theories attempt to explain this disorder and its characteristics from a behavior-analytic standpoint which could aid teachers' knowledge and attitude towards autism spectrum disorder among school children. Although each views the behaviours and characteristics of autism in terms of the principles of behaviour analysis, the proposed causes differ across theories. The behavioranalytic theories only use the principles of behaviour analysis to explain the behaviours, which distinguishes behavior-analytic theories from other psychological theories that typically invent mental constructs which mediate environment-behaviour relations (Donahoe & Palmer, 1994). Ferster (1961) and Drash and Tudor (2004) propose a completely social-environmental etiology for the behaviours seen in autism. Lovaas and Smith's (1989) theory of a mismatch between the child's nervous system and the environment is an interactionist approach to the etiology of autism. Instead of identifying the cause as either genetic or environmentally based, an interactionist perspective takes into consideration that genetic expression consists of an interaction between genes and other factors, including the environment (Moore, 2001). Drash and Tudor (2004) proposed a theory describing autism as a contingency-shaped disorder of verbal behaviour. Their theory claims that a serious deficiency in spoken language is the primary and essential distinguishing characteristic of autism, and that without a deficiency in spoken language an autism diagnosis would not occur. Four major premises are detailed. First, the acquisition of verbal behaviour, or lack thereof, is primarily a function of reinforcement contingencies provided by caregivers and others during an individual's first years of life. For example, in one of their reinforcement paradigms they posit that parents may reinforce gestural minding rather than vocal, which leads to delayed vocal verbal behaviour. Second, during the first three years of life, caregivers and others may inadvertently shape repertoires of disruptive and avoidance behaviours. The third premise is that disruptive and task-avoidance responses are a primary characteristic of children with autism. Fourth, the acquisition of age-appropriate verbal behaviour may be prevented because it is incompatible with the child's disruptive behaviours, such as aversive minding or other avoidance behaviours. Only after eliminating inappropriate verbal and disruptive behaviours can appropriate minds be shaped. Similar to Ferster, the theory explains the presence of repetitive, stereotypical behaviour by the limited range of responses available to the child and the automatic reinforcement such behaviour produces. Drash and Tudor's (2004) theory explains autism in terms of potentially modifiable conditions in the child's environment that are directly observable and measurable, which can help prevent autism and develop interventions.

To carry out the study, the following research questions were asked and answered:

1. What is the knowledge of the teachers about autism spectrum disorder?
2. What is the attitude of teachers towards autism spectrum disorder?

2. METHODOLOGY

This study adopted a descriptive survey design to evaluate teacher competencies and attitudes. The target population comprised public primary school educators within Ekiti State, Nigeria. A sample of one hundred and twenty (120) public primary school teachers was selected using simple random sampling across twenty (20) designated public primary schools. Data were collected using a structured research instrument titled "Teachers' Knowledge of and Attitude towards Autism Spectrum Disorder" (TKAASD).

The TKAASD instrument was developed into three comprehensive sections to capture demographic, cognitive, affective, and behavioral dimensions: (a) Section A collected participants' demographic information (e.g., gender, teaching experience, highest educational qualification, special education training background); (b) Section B evaluated Teachers' Knowledge of ASD across four sub-dimensions (Professional Coursework, Independent Readiness, Clinical Concepts, and Social Metrics); and (c) Section C assessed Teachers' Attitude towards ASD (Experiential Contact, Symptom Management, and Pedagogical Efficacy). Items in Sections B and C were measured on a 4-point scale, where lower values indicated severe deficits/negative attitudes (1 = Strongly Disagree / Very Low, 4 = Strongly Agree / High). The psychometric properties of the TKAASD instrument were established through expert panel validation and field pilot testing. Internal consistency was evaluated using Cronbach's Alpha, yielding an overall reliability coefficient of 0.75. Data collected were analyzed using descriptive statistics, including Frequencies (f),

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Percentages (%), Mean (M), and Standard Deviation (SD), to present demographic distributions and address the two research questions.

3. RESULTS AND DISCUSSION

Results

The demographic composition of the participants and the statistical summaries addressing each research question are detailed below.

Table 1. Socio-Demographic Profile of Surveyed Public Primary School Teachers (N = 120)

Demographic variables	Classification	Frequency (f)	%
Gender	Male	38	31.7%
Gender	Female	82	68.3%
Teaching Experience	1 – 5 years	29	24.2%
Teaching Experience	6 – 10 years	47	39.2%
Teaching Experience	11+ years	44	36.6%
Highest Qualification	NCE	51	42.5%
Highest Qualification	B.Ed. / B.Sc. (Ed.)	61	50.8%
Highest Qualification	M.Ed. / Higher Degree	8	6.7%
Special Education Training	Had Formal Training on ASD / SEN	14	11.7%
Special Education Training	No Formal Training on ASD / SEN	106	88.3%

As shown in Table 1, the demographic composition of the sample (N = 120) indicates that female educators constituted the majority of the workforce (68.3%, n = 82), reflecting typical primary education staffing trends in Nigeria. In terms of teaching experience, over three-quarters of respondents possessed more than 5 years of active classroom experience (39.2% with 6–10 years and 36.6% with 11+ years). While the majority held professional education degrees (50.8% B.Ed.) or NCE qualifications (42.5%), and majority of teachers (88.3%, n = 106) reported having received no formal professional training regarding Autism Spectrum Disorder or special educational needs (SEN).⁵

Table 2. Descriptive Summary of Teacher Knowledge Dimensions Regarding Autism Spectrum Disorder

Knowledge Dimension	Associated Items	Mean	SD	General Inference
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Professional Training Coursework	& Specific ASD training, course inclusion, and degree adequacy	1.34	.468	Inadequate baseline training
Independent Study & Readiness	Personal research and desire for further training	1.16	.359	High motivation / low resources
Clinical Concepts & Modifications	Illness definitions, behaviour changes, and classroom needs	1.14	.342	High structural awareness
Social Metrics & Friendships	Perceived peer networking capabilities	1.52	.502	Highly varied understanding
Composite Framework	Overall Teacher Knowledge Matrix	1.24	.399	Deficient General Knowledge

The structured compilation in Table 2 presents a summarized view of educators' competencies regarding developmental tracking. The data indicate that while primary teachers show high baseline awareness regarding classroom environmental needs and item modifications ($M = 1.14$, $SD = .342$), they experience deep deficits regarding formal baseline preparation, professional development, and specialized higher education coursework ($M = 1.34$, $SD = .468$). The overall composite framework mean of 1.24 ($SD = .399$) mathematically establishes that general diagnostic and formal pedagogical knowledge remains deficient among the surveyed public primary school educators.

Table 3. Descriptive Summary of Teachers' Attitudes towards Autism Spectrum Disorder

Knowledge Dimension	Associated Items	Mean	SD	General Inference
Experiential Contact school personal connections	Direct teaching history and out-of-	1.61	.488	Limited personal exposure

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Symptom Management	Beliefs regarding child self-control over symptoms	1.53	.501	Moderate attribution of control
Efficacy Preparedness	& Perceptions of teaching readiness, conversational ease, role aids	1.28	.430	Low pedagogical confidence
Composite Framework	Overall Teacher Attitude Matrix	1.46	0.468	Predominantly Negative Attitude

The attitudinal dimensions displayed in Table 3 demonstrate that experiential contact and personal exposure remain low among public primary school teachers ($M = 1.61$, $SD = .488$), with the vast majority lacking prior direct teaching experience with autistic pupils. This absence of structured contact directly correlates with low pedagogical confidence and self-perceived teaching readiness ($M = 1.28$, $SD = .430$). Combined, these dimensions yield an aggregate composite mean of 1.46 ($SD = .468$), confirming that inadequate professional preparation fosters predominantly negative or unsupportive attitudes toward pupils with autism spectrum.

DISCUSSION OF FINDINGS

The findings of this study demonstrate that the majority of public primary school teachers in Ekiti State do not possess adequate foundational knowledge of autism spectrum disorder. Most respondents indicated that they had not completed undergraduate or graduate-level coursework containing specific modules on ASD, nor had they participated in specialised inservice training regarding autism diagnosis and classroom management. This empirical observation aligns with the assertions of Simpson (2004), who emphasized that effective education for autistic children requires general and special education teachers to be equipped with specific diagnostic and behavioral management skills. As Toran et al. (2010) postulated, teachers must master pedagogical modules incorporating social-interaction strategies, communication aids, environmental accommodations, and positive behavior support interventions.

Crucially, while these baseline training deficiencies align with the foundational awareness gaps identified by Omotayo et al. (2020) in Ekiti State, the findings of this study offer a deeper, more detailed breakdown. While Omotayo et al. (2020) concluded that generalized awareness was low across mixed academic cadres, the empirical matrix in Table 2 of this study isolates that primary school educators actually possess a high structural and conceptual awareness of classroom environmental needs ($M = 1.14$) and item modifications. Instead, their deficit is strictly localized within formal institutional preparation and higher education coursework ($M = 1.34$). This sub-scale nuance mirrors the work of Edward (2015) in Tanzanian public regular primary schools, which proved that baseline teacher empathy for inclusive education is high, but is systematically paralyzed by a total lack of specialized, university-level teacher candidacy exposure. This indicates that the problem in mainstream primary schools is not a lack of interest or recognition of the disorder's structural demands, but a severe absence of targeted, professional state-sponsored development.

Furthermore, the findings of this study corroborate the findings of a study conducted by Liu et al. (2016) in China, which established that teacher knowledge regarding ASD is strongly linked to institutional support and specialized educational background. Similar to the findings of Liu et al. (2016), primary school teachers in this study expressed receptivity toward acquiring specialized training, yet remained largely unacquainted with evidence-based intervention techniques and specialized community support organizations (Adeola, 2025).

Teachers' attitudes toward pupils with autism spectrum disorder vary based on their level of knowledge and personal contact. The findings of this study revealed that the majority of respondents exhibited predominantly negative or unsupportive attitudes towards ASD inclusion. A significant proportion of educators reported having no direct contact with individuals on the spectrum outside or inside the school environment, contributing to lower conversational ease and reduced teaching efficacy. This negative attitudinal posture is closely associated with knowledge deficits, as observed by ANPPCAN (2007) and Bakare et al. (2008). The primary issue in Ekiti State's foundational schools is not merely passive unawareness (Omotayo et al., 2020), but an active behavioral misattribution that drives a preference for discipline over multidisciplinary therapeutic accommodation. This parallels the diagnostic delays highlighted by Segeren (2023) in South African mainstream environments, where a teacher's inability

to distinguish clinical autistic triggers from behavioral choices directly triggers exclusionary classroom practices and counter-productive disciplinary cycles.

When educators lack structured training, they struggle to recognize clinical manifestations, often misattributing autistic behaviors to academic disinterest or misconduct.

4. CONCLUSION

Autism Spectrum Disorder is a lifelong neurodevelopmental condition; however, pupils on the autism spectrum are capable of significant cognitive, social, and academic progress when supported by early identification and evidence-based interventions. Achieving positive developmental outcomes requires primary school teachers to possess accurate clinical knowledge and supportive attitudes toward inclusive education. This study demonstrated that public primary school teachers in Ekiti State exhibit severe deficits in formal training, low teaching efficacy, and a tendency to attribute ASD manifestations to child-controlled behavior rather than neurodevelopmental factors.

Based on these findings, the following recommendations are proposed:

1. **In-Service Professional Development:** The Ekiti State Ministry of Education, in collaboration with State Universal Basic Education Boards (SUBEB), should mandate continuous, structured in-service training workshops focusing on ASD identification, sensory management, and positive behavior interventions for mainstream primary educators.
2. **Curriculum Enhancement in Teacher Preparation:** Tertiary teacher education institutions in Nigeria should integrate compulsory modules on neurodevelopmental disorders, specifically ASD, into undergraduate and postgraduate education curricula.
3. **Multi-Disciplinary Support Networks:** Establish functional referral linkages between public primary schools, child guidance clinics, and healthcare specialists to assist teachers in implementing individualized education plans (IEPs) and clinical accommodations.
4. **Public Sensitization & Stakeholder Engagement:** Launch localized sensitization campaigns across school districts to debunk misconceptions surrounding autism, reduce stigma, and foster inclusive school cultures.

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