Knowledge and Practice: Teachers' Perspectives on Implementing Inclusive Education for Learners with Autism in Ghanaian Mainstream Classrooms

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Abstract: Inclusive education is increasingly recognised as a priority across the world, but its employment in low resourced contexts can be a challenge. This is a qualitative study which sought to examine the views of 60 mainstream school teachers in Central, Greater Accra and Upper East regions of Ghana about integration of children with autism. Based on Vygotsky's sociocultural theory, the study was designed to explore teachers' knowledge, attitudes toward learners with autism spectrum disorder (ASD), challenges and strategies supporting such a group of children in inclusive classrooms. Interviews were semi-structured and data was subject to thematic analysis following the procedure of Braun and Clarke. Results indicated that teachers had a general familiarity with autism but had little to no detailed information on its characteristics and effective teaching strategies. Their views were varied: While many supported inclusion as a human right that encourages empathy and belonging, others worried about classroom delays and workload implications. They also pointed out structural barriers like overcrowded classrooms, poor preparation, a lack of resources to teach and social stigma. Nevertheless, teachers revealed several recovery strategies through adaptive ways such as differentiated teaching, visual support systems, routines and peer-mediated learning. What this study suggests, therefore, is that Ghana's INFE policy is progressing and progressive while practice on the ground skews more to against it. It calls for enhancing teacher training, allocating resources, involving communities to tackle stigma and creating shared structures between teachers, parents and policymakers to ensure true inclusion of pupils with autism.

Keywords: Inclusive Education, Autism, Teachers' Perception, Ghana, Socio-Cultural Theory, Qualitative Study.

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I. INTRODUCTION

Inclusive education is increasingly being considered as a key lever for equal opportunities in education, also among children with disabilities, including ASD (UNESCO, 2020; Florian, 2019). ASD is a neurodevelopmental condition characterized by problems with social communication, restricted interests and repetitive behaviors. Left unattended, these issues may significantly interfere with a student's involvement in curriculum and social peers (American Psychiatric Association, 2022; Lord et al., 2020; Matson & Kozlowski, 2011). Globally, philosophies of inclusive education have to do with integrating students with disabilities into regular classrooms based upon principles of socialization, academic stimulation, and acceptance within the community (Mittler, 2012; Lindsay, 2007).

In Ghana inclusive education is reflected in policies and strategies, which are directed at promoting educational placement of all schools- aged children into regular schools. Policies have been made by the government to ensure that children with disabilities, including those with Autism Spectrum Disorder, are in mainstream settings and receive quality education (Ministry of Education, Ghana, 2018; Ametepee & Anastasiou, 2015). As reported in the 2010 Population and Housing Census, there are over 100,000 children with disabilities who are between the ages of 6 to 14 years in Ghana and there is a need for inclusive education (Ghana Statistical Service, 2010). However, despite some strides made in policy, the implementation of inclusive education is often impeded by systemic constraints such as inability to train teachers properly, inadequate resources and societal attitudes towards disability (Agbenyega, 2007; Moronkola, 2014).

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Teachers are critical to the process of achieving and anchoring inclusive education. Their conceptualization of autism and hence their attitudes towards disability and pedagogy has a direct influence on the learning experiences of individuals with SEN (Kavale & Forness, 2020; Sharma et al., 2018; Florian & Black-Hawkins, 2011). Understanding teachers' perspectives is, therefore, important when looking for discrepancies in policy ambitions and classroom practice. Such insights can inform targeted interventions, such as professional development programs, distribution of resources and innovative teaching strategies to support inclusivity. Theories like Lev Vygotsky's Socio-Cultural Learning Theory provide a framework to help educators understand the impact of social interactions and cultural influences on learning. Such is the importance of teacher's support for enabling learners with disabilities to be included (Vygotsky, 1978). Furthermore, teacher attitudes are also found to be associated with their readiness to engage in systems that support individuals and collaborative styles of teaching and learning environments which cater for the diverse learners such learners with autism (Loreman et al., 2010: Ebersöhn & Eloff,2006).

Although inclusive education is increasingly becoming highlighted in Ghana, there is limited research on the experiences and perceptions of mainstream teachers' having students with autism. The present study seeks to address this gap by examining general educators' knowledge bases of autism and their perceptions of challenges as well as strategies used to support students with autism in the general education classroom. This study seeks to provide evidence-based classroom recommendations in Ghanaian policy and practice regarding the inclusion of both students with disabilities and children experiencing poverty by way of considering these insights from the perspective of educators.

> Statement of the Problem

Even though policies encouraging inclusive education have been put in place in Ghana, inclusion of children with autism spectrum disorder (ASD) in mainstream classrooms is not without difficulties. Despite an emphasis on inclusive education for all policy regulation at the national level (Ministry of Education, Ghana 2018; UNESCO, 2020) even when translated or enacted in school principles to promote children with disabilities including ASD never meet the implementation they require. Recent reports have shown that the prevalence of ASD in Ghanaian children is relatively high. For example, Ruparelia et al. (2016) reported that up to 38.7% among Ghanaian children under 14 are affected by ASD. This statistic highlights the need for efficient inclusive education strategies to serve this large number of people. Teachers are at the core of making inclusive education work. There have been some barriers for them preventing the provision of effective support to individuals with ASD, as indicated by studies. Owusu and Fialor (2021) noted that many teachers feel unprepared to respond to the idiosyncratic needs of students diagnosed with autism because they have not been well trained, schools often do not provide adequate specialized service for learners with autism, and classroom

workloads are excessive. Moreover, a study from Senoo et al. (2024) found limited parental involvement, lack of teachers' knowledge about ASD, socio-cultural and political barriers, failure to work with other professionals to be the main obstacles that undermine the success of inclusive education for children with ASD in Ghana. These difficulties result in a large policy-to-classroom gap, which has implications for educational inequality and the academic and social progress of children with ASD. The extent to which it is possible to narrow this gap and devise effective interventions is limited in the absence of a proper grasp of teachers' perceptions, knowledge and classroom behaviour.

➤ Research Questions

- What is the level of knowledge among Ghanaian mainstream school teachers regarding autism spectrum disorder (ASD) and inclusive education practices?
- What are the attitudes of Ghanaian mainstream school teachers towards inclusive education, and how do they accommodate learners with autism in their classrooms?
- What are the challenges that mainstream school teachers face in educating students with autism in inclusive school settings?
- What strategies and practices do teachers employ to promote the academic and social inclusion of learners with autism in mainstream classrooms?

> Theoretical and Conceptual Framework

The theoretical framework for the study is based on Vygotsky's (1978) Socio-Cultural Theory of Learning and Development, where learning is a socially mediated phenomenon supported by cultural tools, collaboration and dialogue (Daniels, 2001). The Zone of Proximity Development is a central tenet of Vygotsky's theory, and refers to the distance between what learners can do alone versus with assistance from a more knowledgeable person. In inclusive classrooms, teachers and classmates act as mediators in scaffolding learners to greater competence (Moll, 2014; Rogoff, 2003).

In relation to autism education, this model supports the need for supported structure and mediated interaction. Individuals with autism spectrum disorders (ASD) encounter difficulties in communication, social interaction, and adaptive behavior that are its distinctive feature (American Psychiatric Association, 2022; Lord et al., 2020). According to Vygotsky's principles, these issues can be addressed through teachers' scaffolding of learning, supporting peer work and organizing inclusive settings that utilize as a basis the child's competences and the joint participation (Florian & Black-Hawkins, 2011; Sharma & Sokal, 2016).

Building from this framework, the conceptual model that drives the present study draws attention to four interrelated teacher-level factors that impact on including learners with autism:

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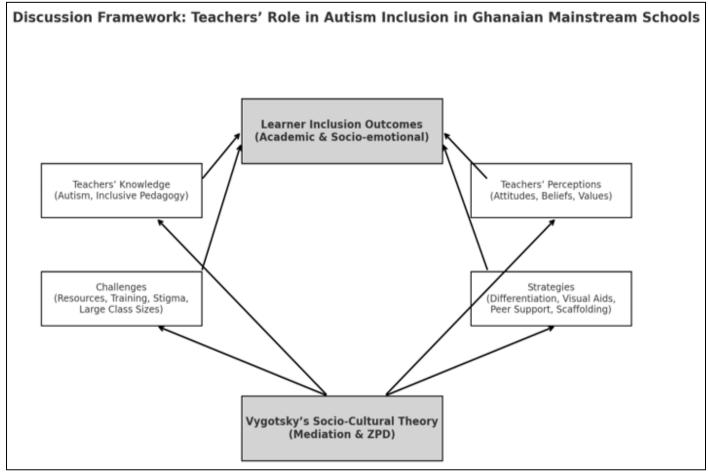


Fig 1 Theoretical and Conceptual Framework

➤ Teachers' Knowledge

The knowledge of teachers about autism and inclusive education are necessary for efficient classroom activities (Alhassan 2014; Sharma et al. 2018). Insufficient awareness frequently contributes to exclusive practices, whereas sufficient knowledge leads to actionable teaching that increases engagement and performance.

> Teachers' Perceptions

Teachers' attitudes, beliefs and expectations impact on the way in which inclusive education is implemented (Avoke, 2010; Forlin, 2013). In Ghana teachers' attitudes, which are driven by cultural and social perceptions that disabled people are inferior, or for reasons of superstition, could facilitate or impede inclusion (Agbenyega, 2007).

> Challenges

Integration is hindered by structural impediments including large class sizes, lack of material resources, inadequate training and weak institutional support (Ametepee & Anastasiou, 2015; Okyere et al., 2021). Such challenges lead to a mismatch between both inclusive policy aspirations and classroom life.

> Classroom Strategies

Teachers deploy strategies like differentiation, visual schedules, peer tutoring and scaffolds in working with students with ASD (Florian & Spratt, 2013; Loreman et al.,

2010). These are closely related to the sociocultural assumption that learning is contextually mediated through social interaction and support.

These clusters of variables combine to affect the inclusion outcomes (both academic and socio-emotional) for autism learners in Ghanaian mainstream schools. Good pedagogical understanding, positive attitudes and strategies of inclusion paired with overall support make it possible for children with autism to participate and learn on equal terms. This integrated model resolves theory/research questions and pragmatic classroom realities, providing solid ground for analysis of inclusive education practices in Ghana.

II. LITERATURE REVIEW

> Inclusive Education: A Global Movement

Inclusive education has gained global attention towards equality for learners with diverse needs to be educated with their peers in regular schools, rather than being segregated because of their differences. It is based around the concept that education is a basic human right, and that diversity enhances learning environments (UNESCO, 2020; Ainscow & Miles, 2008). The Salamanca Statement (UNESCO, 1994) was a turning point declaration that challenged centuries-old exclusionary practices by recommending to governments to re-structure education systems so they included all students irrespective of disability. According to researchers, an

inclusive education helps in advancing social justice and decreasing exclusion, and enhances belonging for students who would otherwise be excluded (Florian 2019; Lindsay 2007).

Although inclusive education is espoused by many, the implementation of this concept varies from country to country. Forlin (2013) posits that in countries with strong policy commitments, challenges such as insufficient levels of teacher preparation, cultural resistance and resource shortages prevent full implementation. In developing countries these concerns are increased: poor services of infrastructure as well as other policy issues also hinders the pace of reforms (Pantic & Florian, 2015).

➤ Autism Spectrum Disorder and Education

Autism spectrum disorder (ASD) is increasingly being acknowledged as a condition that significantly requires individualised educational services due to its diversity. ASD is a neurodevelopmental condition that includes social communication deficiency, difficulties in reciprocal interaction, restricted interest and repetitive behaviour (American Psychiatric Association 2022; Lord et al. 2020). These traits present themselves uniquely for each individual and indicate why there is no one-size-fits-all approach for educating students with autism (Matson & Kozlowski, 2011).

Research shows that children with autism do best in an environment with consistent routine, visual aids; personalized learning plans and training in social skills (Humphrey & Lewis, 2008, Fleury et al., 2014). But without the specific help they need, there's a risk of children being left behind, becoming victims of bullying or doing poorly in school and becoming isolated from society at large (Keen et al., 2016). At the international level, researchers noted that inclusive environments could produce positive results for children with autism through opportunities for socialization and peer modeling (Kamps et al., 2015; Odom et al., 2010).

There is increasing knowledge about autism in Sub-Saharan Africa, although myths are still widespread. Ruparelia et al. (2016) suggest that cultural explanations for autism delay its early detection and intervention. In Ghana, these problems are compounded by lack of resources and scant public awareness that lead to late diagnosis and limited opportunities for education among children with autism.

> Inclusive Education in Ghana

At policy level, Ghana has shown impressive commitment for inclusive education recognized by policy documents including the Inclusive Education Policy (2015) and its the Education Sector Strategic Plan 2010-2020 which focuses on promoting the integration of children with disabilities into the mainstream classrooms (Ministry of Education, Ghana, 2018). These policy measures are also consistent with Ghana's commitment to complying with international conventions such as the UNCRPD (United Nations, 2006).

Yet, despite these proclamations, the evidence suggests there are gaps in implementation. Ametepee and Anastasiou

(2015) noted that although there is government endorsement for inclusion, many schools do not have the facilities, teacher competence or funding required to adequately cater for such students. Teachers are frequently required to mainstream children with autism into already crowded classrooms with no extra assistance on their part (Owusu & Fialor, 2021). Moreover cultural and religious held beliefs affect societal perception of disability which in turn continue to perpetuate stigma and exclusion (Agbenyega, 2007; Avoke, 2010). This leads to a situation in which children with autism are physically present at school and yet ringfenced away from full participation.

> Teachers' Awareness of Autism and Inclusive Teaching

The knowledge of teachers is a significant factor of effective inclusion implementation activity. In Ghana, and likely in other similar contexts, it has been reported that although teachers are supportive of inclusion in principle, they have had little or no training on children with autism and what strategies to employ (Alhassan, 2014; Owusu & Fialor, 2021). Lacking sufficient pre-service and in-service preparation, teachers generally use general classroom management strategies that are not considerate of the learning style of autistic learners (Sharma et al., 2018).

Research from around the world supports that teacher training plays a significant role in enhancing attitudes and competency in inclusive education practices (Sharma & Sokal, 2016). In Ghana, whilst there is usually a lack of special education in the teacher education programme, teachers are hardly prepared to cater for diverse learners since they do not know how to differentiate (Ametepee & Anastasiou, 2015) or children who display autism related behaviour. This lack of awareness impacts performance in the classroom, but also leads to more negative stereotypical assumptions about autism, including that these behaviors are disagreeable or "lazy" (Moronkola, 2014).

> Teachers' Perceptions and Attitudes

Perceptions are indeed important for inclusion since they influence teachers' willingness to make use of inclusive practice. Positive attitudes are associated with increased student innovation, collaboration with families and a level of sustained commitment to meeting learners' needs (Forlin, 2013; Florian & Black-Hawkins, 2011). Negative attitudes, on the other hand are reflected in resistance to inclusion, low expectations of learners who have autism and reliance on exclusionary practices (Avoke 2010; Agbenyega 2007).

Ghanaian attitudes are additionally impacted by cultural values regarding disability. Certain teachers regard autism from spiritual or cultural perspectives, locating it within supernatural causes (Okyere et al., 2021). This narrative can contribute to stigma and may undermine teachers' confidence in the teachability of autistic students. However, in the case of teachers who are provided with sufficient training and supportive school environments, their attitudes are converted to be more positive and welcoming toward inclusive practices (Senoo, Oti-Boadi, Senoo-Dogbey, Bampoe, and Laari 2024)

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> Facilitating the Implementation of Inclusion for Learners with Autism

Learners with autism are excluded from Ghanaian classrooms by structural, cultural and pedagogy inscriptions. Classes are overcrowded with as many as 30-40 learners making it difficult for teachers to provide personalized attention (Ametepee & Anastasiou, 2015). The lack of autism specific teaching materials, including: (1) communication tools; (2) sensory-friendly resources; and (3) tailored learning plans add complexity to the practice of Autism informed teaching (Moronkola, 2014).

There is also a huge issue of cultural stigma. Fear of discrimination may cause families to conceal autistic children, and teachers can be pressured by communities that doubt the usefulness of educating learners with disabilities (Ruparelia et al., 2016). Moreover, inadequate interprofessional cooperation also leads to a situation in which teachers do not often cooperate with speech therapists or occupational therapists or psychologists, who could complement intervention (Okyere et al., 2021). These, together, are what Schuelka (2013) refers to as a policypractice gap meaning that inclusion exists in principle but not quite in practice.

> Teaching Strategies for Students with Autism

Teachers incorporate teaching strategies in their classroom in order to assist their learners with autism such as Differentiated instruction, visual schedules, peer mentoring, and task analysis (Florian & Spratt, 2013; Loreman et al., 2010). Structure and positive reinforcement are also used by teachers to decrease anxiety and encourage participation in learners with autism (Humphrey & Lewis, 2008).

Peer mediated treatments have been especially successful in facilitating social interaction and decreasing loneliness in children with autism (Kamps et al., 2015). In Ghana, some teachers use culturally based approaches such as story telling, singing and group work to enhance participation but these may also need more adaptation and support (Owusu&Fialor 2021). Critically, professional development has been shown to enable teachers to explore these practices and maintain them over time (Sharma & Sokal, 2016).

> Gaps in the Literature

Despite several studies in inclusive education research globally and in Ghana, the literature is significantly limited. There is a lot of research on disability in general but less on autism in particular in Ghana (Ametepee & Anastasiou, 2015; Okyere et al., 2021). Yet few investigate the lived reality experienced by teachers including learners with autism in mainstream classrooms, which is critical if policy and practice are to be connected. Furthermore, scanty studies have been conducted on the long-term implications of inclusion for students with autism within Ghanaian settings. This paper fills this gap by examining teachers' awareness, attitudes, problems and coping strategies, providing new perspectives to the discourse on autism and inclusive education in Sub-Saharan Africa.

III. RESEARCH DESIGN AND METHODOLOGY

Research Design

This present study used qualitative research design; Using semi-structured interview approach to investigate teacher's knowledge, understanding, challenges and method of implementing inclusive education for learners with autism in Ghana. A qualitative method was selected as it provided a means by which to explore the lived experiences of the participants, allowing one to understand and attempt to represent complexity in ways that lend themselves poorly to representation using a quantitative method (Creswell & Poth, 2018; Merriam & Tisdell, 2016). More specifically, semi-structured interviews provided flexibility, allowing teachers to fully describe their perspectives while preserving coherence between the interviews. The design was informed by Vygotsky's socio-cultural theory as it focuses on the mediating role of teachers and social interaction in learning.

> Research Site

The research was conducted across various geographical locations to reflect the cultural and socio-economic diversity pertinent to the study. Consequently, three specific regions were intentionally chosen: Central, Greater Accra, and Upper East. The investigators carried out the study in both public and private basic schools within these regions, as they adhere to the national Inclusive Education Policy (2015) and accept students with autism.

➤ Population and Sampling

The population of the study includes mainstream classroom teachers engaging learners with autism in public and private basic schools. To account for relevance and depth of responses, participants were required to meet two inclusion criteria: (a) teachers must have taught learners with autism for at least two years, and (b) teachers must hold at least a bachelor's degree from an accredited university or college. These criteria ensured that teachers had both professional training and practical experience with inclusive education.In all, 60 participants were selected, with 20 teachers from each region. Purposive sampling was employed to identify teachers with direct experience, as this approach is effective in selecting information-rich cases that provide deep insights (Patton, 2015). Moreover, criterion sampling was used to ensure participants met the study's eligibility requirements. This combination was considered appropriate to achieve data saturation, where no new themes emerged after repeated interviews (Guest, Bunce, & Johnson, 2012).

➤ Data Collection

Data were collected through semi-structured interviews, each lasting approximately 30 to 60 minutes. The interview guide was structured around four core themes:

- Teachers' knowledge of autism and inclusive education.
- Teachers' perceptions and classroom practices.
- 3.Challenges faced in teaching learners with autism.
- Strategies used by teachers to enhance inclusion.

Interviews were conducted in English, audio-recorded with informed consent, and later transcribed verbatim. Field

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notes were also taken to capture contextual details such as tone, emphasis, and classroom setting. The combination of recordings and field notes enhanced the richness and reliability of the data.

➤ Data Analysis

The data were analyzed using thematic analysis, following Braun and Clarke's (2006) six-step process: (1) familiarization with the data, (2) generating initial codes, (3) searching for potential themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the final report. Coding was both inductive and deductive: some codes were derived directly from participants' narratives, while others were informed by the study's conceptual framework. Themes were refined iteratively, and illustrative quotations were included to strengthen authenticity. All data were anonymized using pseudonyms (e.g., Teacher A, Teacher B).

> Trustworthiness

The study ensured trustworthiness by adhering to Lincoln and Guba's (1985) four quality criteria:

- Credibility: Achieved through prolonged engagement with participants, triangulation of interview data and field notes, and member checking, where participants validated summaries of their responses.
- Dependability: Ensured by maintaining an audit trail of research processes, coding decisions, and theme development, enabling replication by other researchers.
- Confirmability: Reinforced through reflexivity, with the researcher keeping a journal to bracket personal biases and ensure findings were grounded in participants' perspectives.
- Transferability: Enhanced by providing thick descriptions
 of the research sites, participants, and educational
 contexts to allow readers to determine the applicability of
 findings to other settings.

> Ethical Considerations

Ethical clearance was obtained from the relevant Ghana Education Service authorities and school principals prior to the study. Participants were informed about the purpose, procedures, and voluntary nature of their participation. Written consent was obtained, and participants were assured of confidentiality and anonymity. Pseudonyms were used in all transcripts and reports to protect identities. Data were securely stored, accessible only to the researcher, and used solely for academic purposes. These measures ensured compliance with internationally accepted ethical research standards.

IV. FINDINGS AND DISCUSSION

> Theme 1: Teachers' Knowledge of Autism and Inclusive Education

Findings across the three regions revealed teachers possessed basic awareness of autism but lacked comprehensive understanding of its complexities. Some teachers associated autism primarily with speech delay or "withdrawn behavior," while others had misconceptions, such as linking it to poor parenting or spiritual causes.

"I know autism affects communication, but I can't explain why some children talk late and others don't talk at all. Sometimes parents also believe it is spiritual." (Teacher A, Northern Region)

"At the training college we learned about disabilities generally, but autism was barely discussed. What I know now is from personal observation." (Teacher B, Central Region)

This reflects international findings: teachers often conflate autism with other developmental delays or lack clear pedagogical strategies (Symes & Humphrey, 2010). According to Alhassan (2014) and Owusu & Fialor (2021), their research found that in Ghana, pre-service training does not adequately prepare teachers for autism specific needs, leaving them to rely on informal learning or personal initiative.

Globally, similar gaps have been reported. In South Africa, Engelbrecht et al. (2016) found that teachers' limited knowledge constrained inclusive practices. Likewise, in the UK, Humphrey and Symes (2013) reported that secondary teachers struggled to identify autism traits, leading to inappropriate classroom responses. These parallels suggest that the issue is both local and global, though more acute in low-resource contexts like Ghana.

> Theme 2: Teachers' Perceptions of Inclusive Education

While most teachers supported the principle of inclusion, their perceptions of feasibility were ambivalent. Not withstanding, many saw inclusion as an opportunity for learners with autism to gain peer interaction and for classmates to develop empathy. Moreover, teachers were worried about classroom disruption and academic slowdowns.

"To me, inclusion is a human right. The child has the right to be here, and I see classmates becoming more caring." (Teacher C, Greater Accra)

"Sometimes I feel guilty because I know I am not giving enough attention to the rest of the class when I focus on one autistic child." (Teacher D, Central Region)

These findings align with Forlin (2013), who emphasized that positive teacher attitudes are essential for successful inclusion. However, attitudes are shaped by contextual realities: in Ghana, cultural beliefs about disability often perpetuate stigma (Agbenyega, 2007; Avoke, 2010). Teachers reported that some community members questioned the value of educating autistic children, reinforcing mixed perceptions.

Comparative studies support this duality. In Nigeria, Obiweluozo et al. (2019) found that teachers acknowledged the benefits of inclusion but feared that learners with autism would "hold back" their peers. Conversely, Sharma & Sokal (2016) showed that sustained training can shift teacher perceptions positively, suggesting that Ghana's attitudes may improve with professional development.

Theme 3: Challenges in Supporting Learners with Autism
Teachers across all three regions described overcrowded classrooms, inadequate training, lack of resources, and cultural stigma as the most pressing challenges. Many reported feeling overwhelmed, especially in classes with over 50 pupils.

"I have 53 children in my class. How can I give special time to one child without neglecting the others?" (Teacher E, Central Region)

"I have no materials like picture cards or special books. I end up drawing on the chalkboard because that is all I have." (Teacher F, Greater Accra)

"In my community, people believe children with autism are cursed. Parents sometimes delay bringing them to school, which makes my work harder." (Teacher G, Northern Region)

These findings echo Ametepee & Anastasiou (2015), who reported a policy practice gap in Ghanaian inclusive education, where implementation is undermined by systemic deficits. The cultural barrier described here has also been documented in Ruparelia et al. (2016), where misconceptions about autism led to delayed interventions.

Globally, challenges are not unique to Ghana. For instance, in India, Singal (2016) highlighted large class sizes and minimal resources as obstacles to effective inclusion. In Kenya, Mugo et al. (2010) found that teachers lacked both materials and institutional support. These comparisons show that while Ghana's situation is severe, it reflects broader patterns in resource-limited settings.

➤ Theme 4: Strategies for Enhancing Inclusion

Despite systemic challenges, teachers displayed remarkable innovation and resilience in supporting learners with autism. They adopted differentiated instruction, visual aids, peer tutoring, scaffolding, and repetition as primary strategies.

"I use peer buddies. One friendly child sits with the autistic learner and helps with group work. It reduces isolation." (Teacher H, Northern Region)

"I break my lessons into smaller steps. I repeat instructions and check my understanding. It takes more time, but I see improvement." (Teacher I, Central Region)

"I draw and use charts. When I show pictures, the autistic child understands better than when I just speak." (Teacher J, Greater Accra)

These strategies align with Florian & Spratt (2013), who emphasized inclusive pedagogy as extending learning opportunities to all learners. Teachers' reliance on peermediated interventions reflects findings by Kamps et al. (2015), who showed that peer networks improve social communication among autistic learners.

Interestingly, some teachers adapted culturally relevant strategies, such as storytelling, songs, and communal play, to engage learners. This creativity demonstrates contextual resilience but also highlights the absence of formal resources. Such adaptations echo Loreman et al. (2010), who argued that inclusion thrives when teachers integrate culturally responsive methods into pedagogy.

> Discussion

The findings of this study reveal a clear policy practice gap in the implementation of inclusive education for learners with autism in Ghana. While the national framework, particularly the Inclusive Education Policy (2015), outlines a progressive vision aligned with global commitments such as the Salamanca Statement (UNESCO, 1994) and the UN Convention on the Rights of Persons with Disabilities (United Nations, 2006), practical application remains inconsistent. Teachers across the Central, Greater Accra, and Northern Regions described limited preparation, scarce resources, and societal stigma as major impediments. These findings resonate with Ametepee and Anastasiou (2015), who argue that Ghana's inclusive education system has yet to move beyond rhetoric due to structural and cultural barriers.

Teachers' knowledge gaps about autism also emerged as a critical barrier. Most participants were aware of autism in general terms but lacked in-depth understanding of its characteristics and effective teaching strategies. This aligns with earlier findings by Alhassan (2014) and Owusu and Fialor (2021), who reported that many Ghanaian teachers feel unprepared to support autistic learners. Similar challenges have been identified in other low-resource contexts. For example, Engelbrecht et al. (2016) in South Africa and Singal (2016) in India both found that while teachers endorse inclusion in principle, inadequate training undermines effective practice. These parallels suggest that Ghana's challenges reflect broader systemic issues across the Global South.

Teachers' perceptions and attitudes toward inclusion were complex and ambivalent. While many viewed inclusion as a human right that fosters empathy and belonging, others expressed concerns about slowing down classroom progress or being unable to balance the needs of all learners. This ambivalence echoes Forlin (2013) and Florian and Black-Hawkins (2011), who argue that teacher attitudes are pivotal in determining the success of inclusion. In Ghana, cultural beliefs about disability compound these challenges, with some teachers reporting that autism is still interpreted through spiritual or superstitious lenses—a finding consistent with Agbenyega (2007) and Avoke (2010). Such perceptions can reinforce stigma and hinder the acceptance of autistic learners in mainstream classrooms.

Despite these barriers, teachers demonstrated resilience and adaptive strategies, often innovating in the absence of formal resources. Strategies such as peer tutoring, visual supports, structured routines, and scaffolding were frequently cited, confirming the importance of inclusive pedagogy described by Florian and Spratt (2013). Peer-mediated interventions, in particular, have been shown internationally

to improve the social communication skills of autistic learners (Kamps et al., 2015). In the Ghanaian context, teachers also adapted culturally relevant methods such as storytelling and songs to enhance participation, illustrating their creativity in resource-constrained environments. However, as Loreman et al. (2010) caution, sustainable inclusion requires systemic support, not just teacher improvisation.

Anchored in Vygotsky's socio-cultural theory, the findings reinforce the role of teachers as mediators who scaffold learning through guided interaction. However, their capacity to fulfill this role is severely constrained by contextual limitations. The absence of teaching assistants, large class sizes, and limited access to specialists such as speech therapists hinder teachers' ability to provide individualized support. This reflects broader concerns raised in international literature about the mismatch between inclusive ideals and classroom realities (Florian, 2019; Lindsay, 2007).

The study contributes uniquely by foregrounding the voices of teachers across three diverse Ghanaian regions, highlighting both common challenges and contextual variations. While urban schools in Greater Accra face overcrowding and resource shortages, teachers in the Northern Region emphasized cultural stigma and delayed diagnosis as significant barriers. This diversity of perspectives underscores the importance of region-specific strategies in policy design and implementation.

Overall, the findings underscore the urgent need for specialized professional development, adequate resource provision, community sensitization campaigns, and collaborative frameworks involving teachers, parents, specialists, and policymakers. Without addressing these systemic barriers, Ghana's inclusive education framework risks remaining aspirational rather than transformative. This aligns with global scholarship, which stresses that inclusive education requires a whole-system approach, where policies, teacher training, resources, and community attitudes work in concert (Ainscow & Miles, 2008; Sharma & Sokal, 2016).

V. CONCLUSION AND RECOMMENDATIONS

This study examined the perspectives of mainstream school teachers in the Central, Greater Accra, and Northern Regions of Ghana regarding the inclusion of learners with autism. Findings highlighted both strengths and gaps in the current implementation of inclusive education. Teachers demonstrated commitment to inclusion and employed innovative strategies such as peer tutoring, visual aids, scaffolding, and differentiated instruction to support learners. However, their efforts were constrained by limited autism-specific knowledge, large class sizes, inadequate resources, and pervasive cultural stigma. Teachers' perceptions also reflected ambivalence—while they acknowledged the benefits of inclusion, they expressed frustration over the strain it places on already stretched classroom systems.

Anchored in Vygotsky's socio-cultural theory, the study underscores the critical role of teachers as mediators of learning who scaffold the academic and socio-emotional growth of learners with autism. Yet, without systemic support, their ability to enact inclusive pedagogy remains limited. These findings reveal a persistent gap between Ghana's progressive Inclusive Education Policy (2015) and the realities of classroom practice, echoing concerns raised in both Ghanaian (Ametepee & Anastasiou, 2015; Owusu & Fialor, 2021) and international literature (Engelbrecht et al., 2016; Singal, 2016).

Based on these insights, several recommendations are advanced. First, teacher training and professional development must be strengthened. Research consistently shows that training enhances teachers' efficacy and attitudes toward autism inclusion (Sharma & Sokal, 2016; Humphrey & Symes, 2013). Autism-specific content should be embedded into pre-service teacher education, while inservice teachers should access continuous professional development opportunities focused on practical, evidence-based strategies.

Second, resource provision and classroom support require urgent attention. Teachers' ability to differentiate learning is hindered by the absence of teaching aids, communication tools, and specialist services. Studies confirm that access to appropriate resources significantly improves outcomes for learners with autism (Kamps et al., 2015; Florian & Spratt, 2013). The Ministry of Education should provide schools with autism-friendly teaching aids, deploy teaching assistants, and ensure access to professional services such as speech therapy and educational psychology.

Third, there is a need for stronger policy enforcement and monitoring. Although Ghana has a progressive policy framework, its implementation is inconsistent due to weak accountability structures. International evidence demonstrates that policies without clear monitoring often remain symbolic (Engelbrecht et al., 2016). Government agencies should allocate dedicated funding, establish monitoring systems, and provide region-specific support that considers contextual differences between urban and rural schools.

Fourth, community and parental engagement must be prioritized to address stigma and misconceptions surrounding autism. Research shows that stigma contributes to late diagnosis and exclusion across Africa (Ruparelia et al., 2016). Public sensitization campaigns, parent—teacher partnerships, and collaboration with NGOs and advocacy groups can strengthen inclusion efforts and create more supportive environments for learners with autism.

Finally, further research is recommended to expand the evidence base in Ghana. While international scholarship on autism inclusion is extensive, Ghana-specific studies remain limited (Senoo et al., 2024). Future research should investigate long-term outcomes of inclusive education for autistic learners, regional variations in practice, and the perspectives of parents and learners themselves. Such

evidence would guide more context-sensitive interventions and ensure that inclusion in Ghana moves beyond policy rhetoric toward meaningful transformation.

In conclusion, the study demonstrates that inclusive education for learners with autism in Ghana is both possible and promising, but only if systemic barriers are addressed. Teachers' voices reflect resilience and innovation, yet they cannot achieve inclusion alone. Collaborative efforts among policymakers, educators, parents, and communities are essential to realize the vision of equitable and inclusive education for all.

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