

Exploring Inclusive Practices in Zimbabwean Rural Mainstream Primary Schools: A Grounded Study on Supporting Learners with Autism Spectrum Disorders

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ABSTRACT

Autism Spectrum Disorders (ASDs) in Zimbabwean inclusive rural primary schools has received little attention in terms of scholarly research. This research study focuses on exploring the state of inclusivity in Zimbabwean rural primary schools for learners with ASDs, identifying challenges, areas for improvement and effective strategies for supporting learners with ASDs. Using constructivist grounded theory with qualitative approach, and semi-structured interviews, data were generated from 30 purposive primary school teachers and Heads in Tsholotsho rural district. An iterative simultaneous data analysis process was used to analyse grounded data which revealed that rural primary school teachers' anxiety, fear, emotional instability, lack of confidence, and lack of knowledge on learners with ASDs were some of the main challenges experienced by teachers in implementing inclusivity in Zimbabwean rural primary schools supporting learners with ASDs. The study also revealed that ASD learners' impulsivity, inattentive and hyperactive behaviours, unavailability of appropriate learning resources such as computers and software, assistive technology, toys, cubes, objects and play centre, as well as large class size were other main challenges faced by teachers during inclusive practices in Zimbabwean rural mainstream primary schools to support learners with ASDs. The study further revealed that ASD learners' problems in communication (delay or lack of language development), impaired social development (lack of development of peer relationships, impaired non-verbal behaviour), resistance to change and ritualistic behaviour were other chronic challenges experienced by teachers in supporting and enhancing effective inclusivity in education for learners with ASD in rural primary schools. The study recommended that there is need for the Ministry of Primary and Secondary Education to ensure that teachers are adequately trained, developed and equipped with psychological knowledge and skills to deal with autistic learners in mainstream classes. There is need for the provision of school psychologists, special needs education specialists and Teaching Assistants (TAs) as a supportive way of stabilizing teachers' perceptions in the teaching of learners with ASD in regular classes as well as promoting a more inclusivity in rural primary schools. There is also need for the teacher education department in tertiary institutions to offer a full autism curriculum to provide more knowledge and to equip teachers with special needs skills of accommodating learners with ASD in inclusive classroom.

Keywords: Autism Spectrum Disorder, Inclusivity, Supporting, rural primary schools, effective teaching and learning, Children with Autism Spectrum Disorder.

INTRODUCTION

Autism Spectrum Disorder (ASD) has increased substantially and is currently the exceeding prevalent neurological disorder among children in rural mainstream classrooms the world over (Hasson et al., 2022; Lei, Qu, Zhu & Wang, 2022; Majoko 2017). In United States, it sounded to be a simple action that embodies autistic learners in mainstream classrooms, but it was difficult to provide an inclusive atmosphere for students with ASD (Iadarola, Shih, Dean, Blanch, Harwood, Hetherington, Mandell, Kasari & Smith, 2018). In the United Kingdom, inclusive practices mean many children with autism spectrum disorders attend mainstream education settings,

but insufficient support can detrimentally impact wellbeing, longer-term development, and the inclusivity agenda (Hasson et al., 2022; 2024). In China, research shows that parents of children with autism perceive a low frequency and efficacy of support extended by mainstream teachers, with limited acceptance and insufficient professional support continuing to pose significant challenges (Mao & Wang, 2023). In alignment with several other worldwide countries, Zimbabwe decrees the education of learners with special needs including autism in inclusive classes (Majoko, 2017; Lei et al, 2022; Sawchuk, 2019) hence motivated this study to grounded explore the inclusivity practices in Zimbabwean rural mainstream primary schools with ASD learners.

Inclusion of learners with ASD can be viewed as a philosophy which entails equal valuation of every ASD learner as belonging to the culture of the regular school class constituting presence, participation, acceptance, and achievement (Zauderer, 2024; Anthony, 2020; Accardo et al 2019). In an inclusive environment, ASD learners are allowed to study and live with their peers in a mainstream classroom (Accardo et al 2019; Majoko 2017; 2018). Successful and effective support for their learning, acceptance, participation, and achievement need also to be provided (Iadarola et al, 2018; Ambady & Mathew, 2018). Teachers need to adopt flexible and individually designed teaching approaches that best suit individual ASD learners and allow them to experience a purposeful and appropriate education (Lei et al, 2022; Iadarola et al, 2018).

In most of the African countries, a developmental disability like autism, is perceived by mainstream classes as a learning disorder surrounded by various negative beliefs and myths hence affected its inclusion (Sepadi, 2025; Genovesi et al., 2022; Musopero, 2018; Majoko, 2017). Many teachers lack knowledge about autism, and the existing laws and policies are not fully executed to improve the welfare of children with autism in mainstream primary schools (Musopero, 2018). Thus, it is hard for children with autism to access mainstream education because of their poor psychomotor skills, unusual behaviours, delayed speech and differences with their neurotypical peers (Musopero, 2018). Similarly, teacher-level studies in Western China indicate that challenging behaviour remains one of the significant barriers hindering student participation in inclusive mainstream educational settings, and that teachers often feel ill-prepared to manage these behaviours, leading to stress and burnout (Han, Cumming & Townend, 2025).

A systematic review across sub-Saharan Africa found that around 95% of children with autism and other developmental disabilities live in low- and middle-income countries, and that research on autism remains limited in this region (Genovesi et al., 2022). In South Africa, despite progressive legislation, implementation gaps persist in rural areas due to limited training and resources, with mainstream educators showing limited ASD knowledge gained primarily through informal means (Sepadi, 2025). Related South African work similarly concludes that although inclusive education is widely discussed, its implementation has not, arguably, been far-reaching, with a lack of specific, targeted approaches towards fully including learners with impairments in the educational space (Nthibeli et al., 2022). In Ghana, teachers report that inadequate parental cooperation, poor ASD knowledge among teachers, socio-cultural and political issues, and a lack of collaboration with other professionals constitute major barriers thwarting the success of inclusive education for children with ASD (Senoo et al., 2024; Sepadi, 2025).

In Zimbabwe, the shift toward inclusion is well documented but concentrated in urban and early-childhood contexts. Majoko's (2018) foundational study noted that the shift in paradigm from exclusion to inclusion in Zimbabwe has resulted in a significant number of children with ASD being educated in mainstream primary classrooms, placing new demands on teachers who are not necessarily adequately prepared for these children. More recent Zimbabwean research has begun to interrogate inclusivity in rural primary schools and discovered persistent challenges alongside emerging opportunities, teachers' substantial barriers in provisioning equitable, quality education to special education needs learners while being silent on ASD learners (Mangena & Chidakwa, 2024; Chinhara & Kuyayama, 2024; Makaya, 2022). Available literature revealed that mainstream primary schools in Zimbabwe are struggling to successfully and effectively motivate, accommodate and teach learners with ASD to restore their shuttered 'SELF' and promote learning (Majoko, 2018; Chitsa, 2020). There is a dearth of studies on inclusivity practices in Zimbabwean rural mainstream primary schools with autism spectrum disorders (ASD) learners hence the study (Genovesi et al., 2024).

Statement of the Problem

Zimbabwean education policy formally commits to inclusive education, yet learners with ASD in rural mainstream primary schools continue to face significant barriers to meaningful participation (Chitsa, 2020; Lei et al, 2022; Majoko 2017). Existing Zimbabwean studies have concentrated on urban settings, early childhood development (ECD) classrooms, secondary schools, or teachers' general attitudes toward inclusion, leaving the lived, day-to-day support practices for learners with ASD specifically within rural mainstream primary schools poorly understood (Mangena & Chidakwa, 2024). Rural teachers typically work with limited specialist support, inadequate training in ASD-specific pedagogy, high pupil-teacher ratios, and scarce assistive resources (Mangena & Chidakwa, 2024; Chinhara & Kuyayama, 2024) associate with persistent equity gaps in Zimbabwean rural inclusive education. Moreover, no study has yet used a grounded theory approach to generate a contextually rooted theoretical account of how rural Zimbabwean primary school stakeholders (teachers, school Heads, parents, and communities) construct and enact support for learners with ASD.

Research questions

1. How do teachers conceptualize inclusivity in education for learners with autism spectrum disorders in rural primary schools?
2. How do teachers implement inclusivity in education for learners with autism spectrum disorders in rural primary schools?
3. What are the challenges of inclusivity in education for learners with autism spectrum disorders in rural primary schools?
4. Which are the suggested strategies to support and enhance inclusivity in education for learners with autism spectrum disorders in rural primary schools effective?

Conceptual Framework

Inclusivity in education for learners with ASD in primary schools entails diagnosis and reduction of barriers to ASD learners' access to regular settings, instruction and maximizing support practices to enhance achievement (Sepadi, 2025). The whole school/whole system approach conceptualize inclusion practices in rural primary schools as a transformation of school cultures, policies, and practices together, rather than an add-on programme (Ainscow, 2020; Roberts & Webster, 2022). Successful inclusive education requires a collaborative school culture, supportive leadership, differentiated instruction, and learner-centred pedagogies operating together (Ainscow, 2020). Institutional support, instructional resources, and continuous professional development are what sustain teacher preparedness for inclusion. A whole-school culture and policy of inclusion provide the container within which three mutually reinforcing practices (teacher capacity, universal design of the learning environment, and individualized plus collaborative support) operate and together they produce the intended outcome such as genuine participation, belonging and learning for autistic learners.

Teachers are the primary agents translating the whole inclusive culture and policy into daily practice, and their understanding of autism and beliefs about learners' capability are significant predictors of successful inclusion (Alassaf, 2025). Yet mainstream teachers frequently report insufficient training, a gap consistent across contexts from Saudi Arabia to South Africa (Almalky & AlwaII. hbi, 2023; Sepadi, 2025). Universal Design for Learning (UDL) and sensory-aware environment matters for autistic learners because mainstream classrooms are often deliberately stimulating environments filled with noise, bright lights and crowded spaces that many autistic learners find debilitating (Jones et al., 2020; McGoldrick et al., 2025). Therefore, UDL focuses on centring sensory, predictability, and communication needs directly in classroom design (McGoldrick et al., 2025). Universal curriculum design provides collaborative support to the ASD learners in mainstream classes. Inclusive practices mean many autistic children attend mainstream settings, but insufficient support can detrimentally impact wellbeing, longer-term development, and the inclusivity agenda (Alassaf, 2025; McGoldrick, 2025; Hasson, 2024). Thus, the above three layers provide meaningful participation, a sense of belonging, and positive identity development among autistic learners in a mainstream class (McGoldrick et al., 2025).

Theoretical Framework

Bronfenbrenner's Bioecological Systems Theory

The exploration of inclusive practices in Zimbabwean rural mainstream Primary Schools with autism spectrum disorder learners was guided by the theoretical framework of Bronfenbrenner's social ecological systems theory which believe that one's surroundings (including mainstream class, other children with ASD, level and variance of ASD, curriculum, work, class size, learning resources and classroom environment) have an influence on the way an individual teacher accommodate learners with ASD (Scott-Croff, 2017; Stephens, 2018; Chitsa, 2020). Applied to inclusive education, the theory frames the inclusion of a learner with ASD as the outcome of bidirectional interactions between the child, the classroom (microsystem), the home-school relationship (mesosystem), district-level resourcing (ecosystems), and national disability policy and cultural beliefs about disability (macrosystem). Bronfenbrenner's social ecological system presents that ASD learner's development occurs within an interactive system of nested influences between the teacher and children with ASD in the rural mainstream school system (Scott-Croff, 2017). Thus, the closest objects are the rural primary school mainstream class members (teacher, peers, learning resources) that are a constant presence in an autistic child's learning life (Predescu, Ghazi & Darjan, 2018; Stephens, 2018).

From this perspective, the rural primary school teacher is attempting to change the autistic child and to facilitate his or her adjustment to the learning environment in mainstream class (Predescu et al, 2018). The intervention at this level is mainly educational guidance and counselling aiming to accommodate and remedy the autistic child in the mainstream (Preece & Trajkovski, 2017) hence inclusivity in education. Thus, challenges in accommodating and teaching children with ASD in rural mainstream primary schools cannot be achieved in isolation but in relation to their mainstream primary school system.

Psychologically, Bronfenbrenner's social ecological systems believe that learners with ASD are social species that interact with teachers, mainstream peers, objects in classroom and learning resources (Predescu et al, 2018). This framework guided the study to critically explore how effective inclusivity was in education for learners with ASD in Tsholostho rural primary schools. In-depth interviews and observations of the interaction between teachers and children with ASD in rural primary schools were informed by Bronfenbrenner's social ecological system theory and generated challenges of inclusivity in education for learners with ASD in Tsholostho rural primary schools (Bronfenbrenner, 2004).

Bronfenbrenner's theory reveals the interconnectedness and interdependence of elements (such as teachers, learners with ASD, mainstream peers, buildings, benches, objects in classroom and learning resources) that form the social ecological system of learners with ASD in rural primary schools (Stephens, 2018). This interaction is the nucleus of the framework that assisted this study to closely explore the inclusivity in education for learners with ASD in Tsholostho rural primary schools. Thus, a gap in any of the elements (between the teacher and learners with ASD in rural primary school system revealed a short circuit (challenges of inclusivity in education for learners with ASD in rural primary schools).

In order to explore the inclusivity practices in education for learners with ASD in Tsholostho rural primary schools, Bronfenbrenner's social ecological system theory demands a better understanding of the intertwined nature of the requirements, context and teaching of learners with ASD in rural primary school society from micro to macro levels (Bronfenbrenner, 2004). Therefore, lack of sustainable partnership between teachers and learners with ASD in rural primary school system at any level within the framework was a recipe for teachers' poor inclusivity in education for learners with ASD in Tsholostho rural primary schools. Bronfenbrenner's social ecological system theoretical framework allowed the researcher of this study to make sense of the inclusion of learners with ASD in rural primary schools. Thus, the framework helped this study to understand the experiences of teachers and learners with ASD in rural primary school mainstream lessons.

The Social Model of Disability

Complementing the ecological lens, the social model of disability reframes disability as arising from disabling environments and social barriers rather than from the learner's impairment itself (Gomez & McKee, 2020). Under

this model, difficulties experienced by learners with ASD in rural Zimbabwean classrooms were understood not as deficits inherent to the child, but as products of inaccessible pedagogy, untrained staff, and exclusionary attitudes. This model directs exploratory attention toward removable, structural barriers (teacher preparedness, curriculum flexibility, and resource availability) rather than toward fixing the learner, aligning with calls in the literature for educators to shift from deficit-based to access-based thinking (Gomez & McKee, 2020).

Contextual and Empirical Grounding in Zimbabwean Inclusive Education Literature

The framework is further situated within an emerging body of Zimbabwean scholarship. Majoko (2017, 2019) established that mainstream teachers in Zimbabwe employ practices such as reinforcement, academic adaptation, and structured routines to support learners with ASD, while parents' perspectives reveal persistent gaps between policy intentions and lived classroom realities. Makaya (2022, 2023) documented that rural teachers frequently report low knowledge and skill levels regarding inclusive education and ASD specifically, compounded by inadequate in-service training and resource shortages. These studies collectively suggest that inclusive practice in Zimbabwe is unevenly distributed across the urban–rural divide, reinforcing the need for a grounded, context-sensitive inquiry into rural realities specifically.

Constructivist Grounded Theory as Methodological-Theoretical Orientation

Because this is a grounded study, the framework also draws on Charmaz's constructivist grounded theory which treats theory as co-constructed between researcher and participants through iterative data collection and analysis, rather than as a pre-existing structure imposed on the data (Charmaz, 2020). This constructivist orientation is compatible with the ecological and social models above. It allows the emergent, in-the-field accounts of rural teachers, parents, and school practitioners to refine and extend the theoretical assumptions of the bioecological and social models rather than simply confirming them.

Synthesis

Together, these perspectives form an integrated framework: Bronfenbrenner's bioecological theory explains 'where' influences on inclusion originate (nested systems from classroom to national policy); the social model of disability explains 'what' should be examined within those systems (barriers, not deficits); the Zimbabwean empirical literature (Majoko, 2017, 2019; Makaya, 2022, 2023; Chitsa, 2020) grounds the framework in the specific realities of the national and rural context. Therefore, constructivist grounded theory provides the epistemological stance for allowing new theoretical insight to emerge inductively from participants' lived experiences of supporting learners with ASD in rural mainstream schools.

LITERATURE REVIEW

Implementation of inclusivity in education for learners with ASD in rural primary schools

International studies present that implementation of inclusivity in education involves an alteration of an inclusive learning environment to allow a learner with ASD to gain access to same content, concepts, skills and meaningful learning as their peers (Ambady & Mathew, 2018). EU-wide policy mapping shows that implementation of autism-specific provision varies with several rural primary schools relying on general special-needs frameworks rather than autism-specific teacher training pathways, weakening consistent classroom-level implementation (Šilc et al., 2024). In Asia, implementation is frequently constrained by the mismatch between national inclusive education policy and ground-level teacher capacity in rural districts. Kurniawati (2021) found that while national policy supports inclusive education, rural Indonesian teachers had to develop ad hoc, self-taught strategies to accommodate learners with ASD due to a near-total absence of specialised training or TA in rural placements. In Zimbabwean urban areas, Chitsa (2020) found that in the absence of appropriate training, teachers often defaulted to punitive management of ASD-related behaviours rather than evidence-based accommodation strategies.

Challenges of inclusivity in education for learners with ASD in rural primary schools

Despite legal mandates under IDEA requiring evidence-based practice for learners with ASD, Suhrheinrich et al. (2021) found that United States rural school districts face implementation barriers distinct including limited access to professional development, greater staffing instability, and reduced organizational infrastructure to sustain new practices once introduced. Albright and Williams (2021) reported that despite a national increase in autism teacher certification, proportionally fewer certified teachers are retained in rural districts, leaving rural schools disproportionately reliant on general education teachers with minimal autism-specific training to

implement inclusion. Šilc et al. (2024), in a study of Slovenian primary schools within Europe, found that although national policy strongly endorses inclusive culture and practice, the correlation between school inclusivity and learners' academic, social, and emotional inclusion was inconsistent, attributing this to the shortage of special educators and psychologists in rural areas. Findings from Ghana show that preschool teachers face similar structural barriers including inadequate training, insufficient assistive resources, and unsupportive school environments in implementing inclusive education for children with ASD (Senoo et al., 2024). This aligns with calls by Chansa-Kabali and Nyoni (2024) in the Zambian context that while ASD-inclusive implementation in rural primary schools is persistently undermined by training deficits, resource shortages, and unsupportive systemic structures, rural communities also hold underutilised social and relational assets that future implementation models could draw upon to close the policy-practice gap.

Research gaps

The bulk of Zimbabwean ASD-inclusion research is concentrating on urban or peri-urban primary and ECD settings (Chitsa, 2020; Majoko, 2018) with rural mainstream primary schools remain comparatively under-researched, despite rural learners constituting a large share of the school-going population. Much of the African and Zimbabwean literature relies on phenomenological or descriptive qualitative designs that describe experiences but do not generate an explanatory, context-grounded theory of how inclusive support for ASD learners is constructed and sustained in low-resource rural settings (Nthibeli et al., 2022; Sepadi, 2025).

RESEARCH METHODOLOGY

Research paradigm

This research study focused on exploring the state of inclusivity in Zimbabwean rural primary schools for learners with ASD, identifying challenges, areas for improvement and effective strategies for supporting learners with ASD. It used constructivist grounded theory within constructivist paradigm. The paradigm assumes that reality is socially constructed through interactions between researchers, participants and their social contexts (Burns et al., 2022; Schmitt & Heilemann, 2021; Charmaz & Thornberg, 2021). This paradigm helped the researchers' experiences, questions, interactions and interpretations contribute to the construction of the emerged understanding of the phenomenon under study. The paradigm allowed the researchers to examine how multiple participants construct knowledge around the inclusivity practices in Zimbabwean rural mainstream primary schools with ASD learners.

Research approach

Based on constructivism paradigm, this study used qualitative research approach to enable the participants to construct their experiences, opinions, facts and feelings used to establish the state of inclusivity practices in Zimbabwean rural mainstream primary schools with ASD learners. As prescribed by Creswell & Poth (2024) this research approach allowed the researcher of this study to understand the participants' thoughts, feelings, viewpoints and experiences on the phenomenon under the study. Qualitative approach, as a naturalistic research method, helped this study to describe and evaluate the state of inclusivity practices in Zimbabwean rural mainstream primary schools with ASD learners. Holtrop et al (2025) explains that the strengths of qualitative research approach are the establishment of trust and rapport with research subjects. Therefore, this approach minimized suspicion and distrust and allowed for an increase in trust and credibility between the researcher of this study and the participants.

Research design

The appropriate design used was a Constructivist Grounded Theory design grounded in systematically collecting and analysing empirical data (Charmaz & Thornberg, 2021; Schmitt & Heilemann, 2021). Constructivist grounded theory produced a study's central theoretical explanation through an iterative, inductive process rather than by testing a pre-existing hypothesis because the primary interest was substantive theory generation (Charmaz, 2021). This iterative process enabled the researcher to investigate emerging concepts more deeply and refined developed categories (Charmaz & Thornberg, 2021). The design therefore permitted the research to follow emerging explanations rather than being restricted to predetermined assumptions. This study started with simultaneous data collection and analysis and constant comparison (Charmaz, 2021). Thus, this design allowed data collection and analysis to occur concurrently, allowing emerging insights to inform subsequent data collection (Charmaz, 2020). Techniques such as initial and focused coding, constant comparison, memo writing, theoretical sampling and category development enabled the researcher to move progressively from participants' experiences to more abstract conceptual explanations (Charmaz & Thornberg, 2021). The design provided a systematic means of moving beyond to generate qualitative data to describe the state of inclusivity practices in Zimbabwean rural mainstream primary schools with ASD learners.

Population

The population of a study refers to the entire group of individuals that share the characteristics the researcher is interested in and to which findings are intended to relate (Casteel & Bridier, 2021). In this constructivist grounded theory (CGT), which is concerned with generating a substantive theory of inclusivity practices in Zimbabwean rural mainstream primary schools with ASD learners, the population is defined qualitatively and purposefully rather than by sampling frame probabilities (Charmaz & Thornberg, 2021). In this study, the population was comprised of 16 rural primary schools with an approximate target population of 240 teachers and 16 Primary School Heads in Tsholotsho rural district. Therefore, the approximate total target population of this study was 256 potential participants. As prescribed by Charmaz and Thornberg (2021), the chosen population was conceptually relevant, meaning that its members were positioned to have lived through, witnessed, experienced or otherwise had insight into the inclusivity practices in Tsholotsho rural mainstream primary schools with ASD learners, since the credibility of the emergent theory rests on the richness and relevance of participants' experiential accounts. Therefore, primary school teachers and School Heads in Tsholotsho rural district were chosen on the grounds that they were only individuals who had directly lived the inclusion of ASD learners in the mainstream classes and could generate theoretically meaningful data.

Participant Recruitment

Setting. Participants were drawn from rural mainstream primary schools in Tsholotsho rural district of Matabeleland North in Zimbabwe where learners with autism spectrum disorder are taught alongside typically developing peers.

Sampling frame and access. Initial access was negotiated through the relevant District Schools Inspector, following formal permission from the Ministry of Primary and Secondary Education. School Heads at eligible schools were approached first as institutional gatekeepers, both as key informants and as a route to identifying teachers with direct classroom experience of learners with ASD.

Sample

Sample size in constructivist grounded theory cannot be fixed a priori because it is governed by the emergent, iterative logic of theoretical sampling and is ultimately determined by the point at which no new properties, categories, or relationships arise from further data collection (Charmaz & Thornberg, 2021; Sim et al., 2018). Therefore, a sample size of 30 participants (25 rural primary school teachers and 5 School Heads) in Tsholotsho district was determined by theoretical saturation where no new or relevant information seemed to emerge. The sample size of this rigorous qualitative and grounded theory study remained provisional and subject to revision as data analysis proceeded (Sim et al., 2018). As prescribed by Hennink and Kaiser's (2022), this study reached data and thematic saturation within a range of three to five interviews and open-ended questionnaire member

checking for the same participants examining narrow research questions, offering an empirically grounded benchmark that CGT researchers can use to justify an initial sampling target.

Sampling procedure

In this constructivist grounded theory study, purposive sampling technique was used. Purposive (or purposeful) sampling is a non-probability technique in which participants are deliberately selected because they possess characteristics, knowledge, or experiences that are directly relevant to the research question or phenomenon (Campbell et al., 2020). In grounded theory, purposive sampling is typically followed, and later supplemented, by theoretical sampling, whereby emerging categories from initial analysis directly inform the selection of subsequent participants so that the developing theory can be refined and its properties fully elaborated (Charmaz & Thornberg, 2021). Therefore, purposive sampling technique helped the researcher to identify participants who were able to provide information-rich accounts, which in turn strengthened the methodological rigor and trustworthiness of the study. Furthermore, purposive sampling technique assisted the researcher to target participants from Tsholotsho rural district primary schools who were able to speak knowledgeably about the phenomenon under investigation and enabled the theoretical sampling that CGT analysis subsequently required.

Data Collection instruments and procedures

The semi-structured interview for primary school Heads in Tsholotsho rural district was the principal data generating instrument in constructivist grounded theory because it balanced a flexible guide of open-ended questions with the freedom to probe, follow up, and pursue emergent lines of inquiry that a fixed open-ended questionnaire cannot accommodate (Adeoye-Olatunde & Olenik, 2021; Elhami & Khoshnevisan, 2022). Semi-structured interviews allowed the researcher to keep the conversation focused on the research questions while retaining autonomy to explore participant-driven insights as they arose (Adeoye-Olatunde & Olenik, 2021). As prescribed by King et al (2025), CGT interviews typically helped the researchers to begin with broad, open-ended prompts and increasingly incorporate more focused, theoretically driven questions as initial coding and constant comparison generated categories that require further exploration. The semi-structured format was more conversational and informal, putting participants at ease and increased their chances to disclose authentic experiences and interpretations on the inclusivity practices in Zimbabwean rural mainstream primary schools with ASD learners (Charmaz & Thornberg, 2021).

Open-ended questionnaires, for primary school teachers in Tsholotsho rural district, were used in this constructivist grounded theory study and allowed participants to respond in their own words which made them a valuable complementary tool for accessing participants' subjective meanings, a central concern of constructivist inquiry (Bogetz et al., 2020). Open-ended questions helped the researcher to elicit rural primary school teachers' unprompted, self-defined accounts of inclusivity practices in Zimbabwean rural mainstream primary schools with ASD learners experience. As noted by Conry-Murray et al. (2024), open-ended items generated richly textured qualitative data through systematic, transparent and reflexively documented coding procedures based on thematic analysis and produced trustworthiness data.

Data Analysis

Data analysis used in this constructivist grounded theory (CGT) design was an iterative, simultaneous process in which coding, comparison, memo-writing, and further sampling continually inform one another until a substantive theory was constructed (Charmaz & Thornberg, 2021; Metelski et al., 2021). It was this combination of procedures that justified CGT data analysis as a single, integrated methodological process rather than a sequence of separate techniques (Metelski et al, 2021). Therefore, this data analysis process allowed simultaneous data collection and analysis, theoretical sampling, constant comparison at every analytic stage, reflexive memo-writing, and a flexible two-stage coding system as the defining operational features that distinguish CGT analysis from more linear qualitative approaches (Bobbink et al., 2024).

The constant comparative method underpins every stage of CGT analysis. For instance, incidents, codes and emerging categories were continuously compared against one another, and against new data, to identify similarities, differences, and gaps that refine the developing analysis (Bobbink et al., 2024; Charmaz &

Thornberg, 2021). This method empowered this study to collect and analyze data at the same time and allowed the researcher to concentrate on subsequent data collection of the issues that appear analytically significant rather than pursuing a fixed and pre-determined line of inquiry (Bobbink et al, 2024). Coding in CGT typically proceeds through an initial (open) stage and a focused stage and may extend to theoretical coding once core categories are established (Giles et al., 2016; Metelski et al., 2021). Initial coding assisted the researcher to fracture the data into small segments, often line-by-line, to remain close to participants' own words and to resist imposing preconceived concepts on the data. Focused coding followed to allow the researchers to use the most frequent or theoretically significant initial codes to sift, sort, and synthesize larger batches of data into tentative categories (Giles et al., 2016). This coding system gave the researcher of this study a room to move back and forth between codes and data as understanding deepens.

Memo-writing was treated in this CGT as an analytic tool to capture the researcher's evolving thinking about codes, categories, and their interrelationships as analysis proceeded (Bobbink et al., 2024; Charmaz & Thornberg, 2021). It allowed the researcher to document what occurred during data collection, articulate emerging concepts, and create an auditable trail that links the final theory back to specific analytic decisions on inclusivity practices in Zimbabwean rural mainstream primary schools with ASD learners. Theoretical sampling and saturations were used to develop and refine emerging categories, until no new data or relationships were observed (Hennink & Kaiser, 2022; Metelski et al., 2021).

RESULTS AND CONCLUSIONS

Conceptualisation of inclusivity in education for learners with autism spectrum disorders in rural primary schools

The findings from this constructivist grounded theory study revealed and concluded that rural primary school teachers conceptualised inclusivity in education for learners with ASD in rural primary schools as allowing ASD learners to learn and live with their peers in a mainstream classroom, and as considering these ASD learners' access to the regular classes focusing on the equal opportunity to get quality of learning although it was not easy to implement it due to their problems in communication (delay or lack of language development), social development (lack of development of peer relationships, impaired non-verbal behaviour), resistance to change and ritualistic behaviour. The study also revealed and concluded that the rural primary school teachers perceived the importance of inclusivity in education for learners with ASD as to promote conducive developments and education of learners with autism alongside their typically developing peers and, as to stimulate learning, development and feelings of acceptance for ASD learners within the mainstream class although this was not happening.

Implementation of inclusivity in education for learners with autism spectrum disorders in rural primary schools

The findings revealed and concluded that rural primary school teachers tried to implement inclusivity in education for learners with ASD by using aversive stimulus such as punishment, harsh or fame rebuke and sharp disapproval or criticism of autistic behaviour as a way of controlling autistic learners' repetitive behaviours during the mainstream lesson. It also revealed and concluded that rural primary school teachers tried to implement inclusivity in education for learners with ASD but failed due to lack of special needs approaches and techniques, negative attitude toward the learners with ASD, learner tantrums, unusual repetitive behaviours and hyperactivity.

Challenges of inclusivity in education for learners with autism spectrum disorders in rural primary schools

The results from this constructivist grounded theory study revealed and concluded that anxiety, fear, emotional instability and lack of confidence, lack of knowledge on learners with ASD, inattentive and hyperactive behaviours, ASD learners' impulsivity, unavailability of appropriate learning resources such as computers and software, assistive technology, toys, cubes, objects and play centre, large class size were some of the main challenges of inclusivity practices in Zimbabwean rural mainstream primary schools with ASD learners.

RECOMMENDATIONS

1. Rural primary school teachers tried to implement inclusivity in education for learners with ASD but failed due to lack of special needs approaches and techniques, negative attitude toward the learners with ASD, tantrums, unusual repetitive behaviours and hyperactivity, and large class size. Therefore, it is recommended that;
2. There is need for the government to establish special needs education facilities in all rural schools to improve the inclusivity practices in rural mainstream primary schools with ASD learners and formalizing autism support groups under control of Teaching Assistants (TAs) in all rural primary schools to educationally guide, counsel and support learners with ASDs.
3. There is need for the rural primary school teachers to use individualized attention during their mainstream lessons to accommodate and support learners with ASD.
4. There is need for the Ministry of Primary and Secondary Education to reduce the class size of learners to promote effective teaching and supporting of learners with ASD in mainstream primary schools by recruiting more qualified teachers and learning facilities.
5. There is need for the Ministry of Primary and Secondary Education to ensure that teachers are adequately trained, developed and equipped with psychological knowledge and skills to deal with autistic learners in mainstream primary schools.
6. There is need for the provision of school psychologists and special needs education specialists as a supportive way of stabilizing teachers' perceptions in the teaching of learners with ASD in regular primary school classes.
7. There is need for the teacher education department in tertiary institutions to offer a full autism curriculum to provide more knowledge and to equip teachers with special needs skills on the inclusivity practices in mainstream primary schools with ASD learners.
8. A more comprehensive study on the inclusivity practices in rural mainstream primary schools with ASD learners should be executed nationally to promote effective support and inclusive practices in rural mainstream primary schools with ASD learners in Zimbabwe and elsewhere.

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