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CROSS-CULTURAL PERSPECTIVES ON APPLIED BEHAVIOR ANALYSIS INTERVENTIONS FOR AUTISM SPECTRUM DISORDER: A COMPARATIVE STUDY OF NIGERIA AND THE UNITED STATES

Ogechukwu Emmanuel Okondu[1]; Adeola Dorcas Folorunso[2,3]; Rukayat O. Adetona[4]; Jesutofunmi Mary Isiwekpeni[5]; Oreofeoluwa O. Okechukwu[6]; Tiwalola Kolawole Osunfisan[7] & Lateefat Odunuga[8]

[1]Department of Health Promotion and Public Health Education, Nnamdi Azikiwe University, Nigeria
[2]Liverpool John Moores University, United Kingdom
[3]Matermental Awareness Health Foundation, California, USA
[4]Indiana Public School, USA
[5]The Orchid Haven Limited, Nigeria
[6]The Orchid Foundation for Neurodevelopmental Disabilities, Nigeria
[7]Henry Ford Health Detroit, Michigan, USA
[8]Department of Psychology, National Louis University, Chicago, USA
Email: [1]emmaokondu@gmail.com, [2,3]matermental23@gmail.com, [4]rukade94@gmail.com, [5]tofunmiagunbiade@gmail.com, [6]orayokechukwu@gmail.com, [7]talktodrtiwa@gmail.com, [8]lateefatodunuga@yahoo.com

Corresponding Author: Okondu Ogechukwu Emmanuel, Department of Health Promotion and Public Health Education, Nnamdi Azikiwe University Awka, Anambra State, Nigeria. Email: emmaokondu@gmail.com, Tel: +234 07085779565

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Abstract

Study Description: This study explores the views of Applied Behavior Analysis (ABA) professionals from Nigeria and the United States regarding the developmental needs of individuals with autism. It focuses on goal-setting and intervention strategies for a 20-year-old individual (Child P) and a 10-year-old child (Child R). Through telephone interviews and a non-probability sampling method, the research investigates how cultural and contextual factors influence ABA practices in these two countries. **Study Rationale**: The rationale behind this study is that autism intervention strategies must be culturally sensitive to effectively meet the unique needs of individuals with autism in various societal contexts. Although ABA is widely acknowledged as an effective approach, its implementation often varies based on cultural and contextual factors. This study aims to highlight these differences, particularly in strategies used for older individuals transitioning to independence and younger children developing foundational skills. By examining the experiences and methods of ABA professionals in Nigeria and the US, the research seeks to identify best practices and underscore the significance of culturally adaptive interventions that

align with societal expectations and individual needs. **Theoretical Framework:** This study utilizes ecological systems and applied behavioral theories to emphasize how ABA professionals tailor interventions to fit individual, family, and cultural contexts, ensuring they align with developmental objectives and cultural standards. **Methodology**: The qualitative study used telephone interviews with Nigerian and US ABA professionals to explore goal-setting and intervention strategies for autism. Data analysis identified regional similarities and differences in practices. **Findings**: Nigerian ABA professionals emphasize societal norms and practical skills, whereas their US counterparts concentrate on individual strengths and family engagement. This illustrates the cultural differences in autism interventions and underscores the necessity for adaptive, context-sensitive ABA strategies worldwide.

Keywords: Developmental Needs, ABA Professionals, Neurodivergent, Nigeria, USA

Introduction

Applied Behavior Analysis (ABA) has emerged as one of the most widely utilized interventions for individuals with Autism Spectrum Disorder (ASD), emphasizing behavior modification through reinforcement strategies. The implementation of ABA varies significantly across different cultural contexts, with socio-economic, educational, and healthcare systems influencing how professionals approach intervention. In high-income countries such as the United States, ABA is structured, evidence-based, and guided by policies such as the Individuals with Disabilities Education Act (IDEA), ensuring that individuals with ASD receive specialized services tailored to their developmental needs (Zuckerman et al., 2021). In contrast, low- and middle-income countries (LMICs) such as Nigeria face systemic challenges, including limited access to ABA-certified professionals, societal stigma, and a lack of structured governmental support for autism interventions (Igwe et al., 2020). Understanding these differences is essential for promoting culturally sensitive and contextually relevant ABA practices that cater to the needs of neurodivergent individuals in diverse regions.

Autism is conceptualized differently across cultures, affecting how interventions such as ABA are implemented. In the United States, ASD is primarily understood through a biomedical lens, guided by standardized diagnostic criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric Association, 2022). This perspective ensures that ABA interventions are closely aligned with developmental goals, behavioral assessments, and individualized treatment plans. However, in Nigeria, ASD is often misunderstood, with many attributing it to supernatural or spiritual causes, leading to delayed diagnosis and reduced acceptance of behavioral interventions (Bakare & Munir, 2021). This cultural perception impacts how ABA professionals in Nigeria approach intervention, as they must navigate parental skepticism, societal expectations, and resource constraints while attempting to implement structured behavioral therapies (Ajuwon et al., 2019).

Cultural values play a significant role in shaping ABA practices, influencing intervention goals, parental involvement, and expectations for individuals with ASD. In Nigeria, where collectivist

cultural norms emphasize social integration and conformity, ABA interventions focus on functional skill development to ensure individuals with ASD can participate in communal life (Dillenburger, 2021). Nigerian ABA professionals often prioritize behaviors that facilitate independence, such as self-care, communication, and vocational training, to align with societal expectations (Magana et al., 2019). Conversely, in the United States, there is a growing movement toward neurodiversity, which encourages the acceptance of different cognitive abilities rather than strictly modifying behaviors to fit societal norms (Sue et al., 2019). U.S.-based ABA professionals emphasize self-advocacy, autonomy, and individualized strength-based interventions, ensuring that individuals with ASD can make personal choices and integrate into educational and social settings based on their unique capabilities (Zuckerman et al., 2021).

Parental involvement is another critical factor that differentiates ABA practices between Nigeria and the United States. In the U.S., parents play an active role in ABA interventions, participating in structured training programs, collaborating with therapists, and advocating for their children's educational rights (Dillenburger, 2021). The availability of parent training programs and early intervention services enables families to incorporate ABA principles into daily routines, improving the long-term effectiveness of interventions (Sue et al., 2019). In contrast, parental engagement in Nigeria is often limited due to stigma, lack of awareness, and financial constraints. Many parents of children with ASD in Nigeria are hesitant to seek ABA therapy due to fear of discrimination or misconceptions about the nature of autism (Igwe et al., 2020). This reluctance affects the consistency of intervention and reduces the overall effectiveness of ABA in helping children develop essential social and adaptive skills (Ajuwon et al., 2019).

Training and certification pathways for ABA professionals also vary across regions, influencing the quality and accessibility of interventions. In the United States, the Behavior Analyst Certification Board (BACB) provides standardized training programs that ensure ABA practitioners adhere to evidence-based methodologies (Bronfenbrenner, 2005). This structured certification process ensures that professionals receive formal training in behavior analysis, ethics, and intervention planning. In contrast, Nigeria has a shortage of certified ABA professionals, with most practitioners relying on informal training, workshops, or mentorship programs rather than standardized certification (Bakare & Munir, 2021). The lack of a structured training system limits the availability of skilled ABA professionals, leading to inconsistent intervention quality and reduced access to services for individuals with ASD (Magana et al., 2019).

Resource availability further distinguishes ABA implementation in Nigeria and the United States. In the U.S., individuals with ASD have access to a range of government-funded services, private therapy centers, and school-based intervention programs, making ABA widely available (Sue et al., 2019). However, financial barriers still exist, particularly for low-income families who may struggle to afford ABA services despite insurance coverage options (Zuckerman et al., 2021). In Nigeria, financial constraints pose an even greater challenge, as ABA therapy is largely private and inaccessible to families with limited economic resources (Igwe et al., 2020). Government support for autism interventions is minimal, and many families must rely on charitable organizations or community-based initiatives to access behavioral therapies (Ajuwon et al., 2019). These disparities highlight the need for policy-driven efforts to expand access to ABA services in

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LMICs and ensure that individuals with ASD receive adequate support regardless of socioeconomic status (Dillenburger, 2021).

The ecological systems theory provides a useful framework for understanding the differences in ABA practices across cultures, emphasizing the interaction between individual, familial, institutional, and societal influences (Bronfenbrenner, 2005). In the U.S., the presence of structured policies, formal training, and parental advocacy supports a well-established ABA framework that prioritizes individual development and autonomy. In contrast, Nigeria's limited institutional support, cultural beliefs, and economic challenges shape an ABA model that focuses on practical skill acquisition and social conformity (Bakare & Munir, 2021). While both approaches aim to improve the quality of life for individuals with ASD, their effectiveness depends on how well interventions are adapted to fit cultural and systemic realities (Magana et al., 2019).

Cross-cultural comparisons of ABA practices reveal significant variations in intervention goals, professional training, parental involvement, and resource accessibility. While the United States benefits from structured policies and professional certification pathways, financial and systemic barriers still exist, particularly for marginalized populations. In Nigeria, limited awareness, stigma, and economic constraints hinder the widespread adoption of ABA, necessitating innovative and culturally adaptive intervention strategies. Future research should focus on developing ABA models that incorporate local cultural values while maintaining evidence-based methodologies, ensuring that individuals with ASD worldwide receive appropriate and effective support. Expanding access to formal training, increasing public awareness, and strengthening governmental support for autism interventions are crucial steps toward improving ABA practices in diverse global contexts.

Method

Overview

Semi-structured telephone interviews were used in this qualitative study to investigate goal-setting and intervention techniques among ABA professionals in the US and Nigeria. With an emphasis on how practitioners customize intervention strategies within their own sociocultural and institutional contexts, the study sought to discover regional parallels and differences in ABA procedures.

Study Design and Sampling

ABA specialist personal experiences were examined in depth using a qualitative phenomenological approach. Using a snowball sampling technique, the study started with well-known professionals in the US and Nigeria who then recommended more volunteers. This approach guaranteed access to a wide variety of viewpoints from different professional contexts and skill levels.

Study Participants Recruitment

ABA professionals, therapists, and educators employed by autism intervention agencies in both nations were among the participants. Participants had to actively participate in autism-related interventions and have at least three years of experience practicing ABA in order to meet the inclusion criteria. Professionals with no direct ABA experience or those who just worked in administrative capacities without any clinical involvement were excluded.

Data Collection

Over the course of six weeks, semi-structured telephone interviews lasting 30 to 60 minutes each were done. Participants' experiences with ABA goal-setting, preferred intervention strategies, perceived efficacy, and modifications to account for systemic and cultural variations were the main topics of the interviews. Open-ended questions were incorporated into the interview guide to encourage thorough answers and let participants go into further detail about their individual experiences. Interviews were audio recorded and then verbatim transcribed to guarantee consistency.

Data Analysis

Patterns and important themes were found throughout the dataset using a thematic analysis approach. NVivo software was used to code the transcribed interviews, enabling the methodical classification of emerging themes. To identify parallels and differences in ABA goal-setting and intervention techniques, thematic patterns were analyzed between the two locations. To reduce bias and guarantee inter-rater reliability, the transcripts were examined by two separate researchers.

Results

The results show how different cultural viewpoints influence ABA procedures. According to traditional norms of independence and conformance, ABA treatments in Nigeria place a high priority on developing functional skills and integrating into society. However, effective implementation is hampered by resource limitations and low parental involvement. In contrast, ABA practitioners in the US place a strong emphasis on neurodiversity, family cooperation, and individual strengths, making sure that therapies are tailored to the specific requirements of each child. Both areas deal with issues, such as societal perceptions of autism and budgetary constraints, despite their variations. These results emphasize the need for culturally relevant ABA tactics that are grounded on facts and provide tailored, individualized support.

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Table 1: differences and similarities in Applied Behavior Analysis (ABA) practices between Nigeria and the United States

Themes	Sub-Themes	Nigeria	United States
Goal-Setting in ABA	Focus of intervention	Emphasis on practical skills and social adaptation to fit societal norms	Focus on individual strengths, self-advocacy, and family engagement
	Parental involvement	Limited parental participation due to stigma and limited awareness	High parental engagement through structured training and collaboration
	Influence of cultural values	Preference for skill-building that aids independence in adulthood	Emphasis on supporting neurodiversity and strengths-based approaches
Intervention Strategies	Preferred ABA techniques	Emphasis on structured routines, reinforcement of compliance-based behaviors	Integration of naturalistic teaching, self-regulation, and choice-making
	Adaptability to cultural norms	Modification of interventions to align with societal expectations	Customization of interventions based on individual needs and preferences
	Availability of ABA resources	Limited access to standardized materials and professional training	Extensive access to evidence-based ABA resources and continuing education
Challenges in ABA Implementation	Financial and structural barriers	High cost of therapy, limited government support, and scarce specialized professionals	Availability of insurance coverage but high therapy costs remain a challenge
	Social stigma and perception of autism	Autism often misunderstood, leading to reluctance in seeking intervention	Greater societal awareness and advocacy, though stigma still exists

	Training and professional development	Fewer certified ABA professionals and lack of formal training programs	Stronger certification processes and ABA specialization pathways

Discussion

The findings of this study highlight key cultural and contextual differences in the implementation of Applied Behavior Analysis (ABA) interventions for individuals with Autism Spectrum Disorder (ASD) in Nigeria and the United States. These differences are shaped by sociocultural beliefs, parental involvement, access to resources, and professional training. While ABA professionals in the United States emphasize a strengths-based and family-centered approach, their Nigerian counterparts focus on practical skill development and social conformity to meet societal expectations. This divergence underscores the need for culturally sensitive ABA interventions that consider local values, structural limitations, and professional expertise.

One of the most striking findings from this study is the contrasting perceptions of neurodivergence in the two countries. In the United States, ASD is widely recognized as a neurodevelopmental condition that falls under the broader neurodiversity paradigm, which promotes acceptance and individualized support (Zuckerman et al., 2021). ABA interventions in the U.S. reflect this perspective, aiming to enhance the unique strengths of individuals with ASD while equipping them with adaptive skills to navigate social and educational environments (Dillenburger, 2021). In contrast, Nigerian professionals tend to view autism and neurodivergence through a medicalized and, at times, socio-spiritual lens, which influences both diagnosis and intervention approaches (Igwe et al., 2020). This perspective leads to a greater emphasis on compliance-based behavioral modification, with interventions tailored toward ensuring that individuals with ASD conform to expected social behaviors (Bakare & Munir, 2021).

Parental involvement in ABA therapy also differs significantly between Nigeria and the United States. In the U.S., parents play an active role in intervention planning, participating in structured training programs that equip them with the skills to reinforce ABA strategies at home (Magana et al., 2019). Many ABA programs in the U.S. integrate parental training as a core component, recognizing that consistent reinforcement across home and school environments improves long-term outcomes (Sue et al., 2019). In contrast, parental engagement in Nigeria is often limited due to stigma, lack of awareness, and financial constraints. Many parents in Nigeria may be hesitant to seek ABA therapy due to misconceptions about autism, cultural taboos, or financial limitations that make long-term therapy unaffordable (Igwe et al., 2020). Consequently, Nigerian ABA professionals often have to work with minimal parental collaboration, which can hinder the effectiveness of intervention strategies.

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Another significant difference between the two regions is the approach to goal-setting within ABA interventions. In the United States, ABA professionals prioritize individualized, strengths-based approaches that focus on developing self-advocacy, independent decision-making, and social engagement tailored to the individual's cognitive abilities (Zuckerman et al., 2021). The emphasis is on equipping individuals with ASD with the skills needed to integrate into educational and social environments while respecting their unique neurodivergent profiles (Dillenburger, 2021). However, in Nigeria, ABA professionals are more likely to focus on functional skills that enhance daily living, vocational independence, and social conformity. The goal of intervention is often to ensure that individuals with ASD can function within societal expectations, which may result in more rigid behavioral conditioning techniques (Bakare & Munir, 2021). This difference reflects broader societal norms, where individualism and self-expression are encouraged in Western contexts, while collectivist values dominate in many African cultures, emphasizing conformity and social harmony (Ajuwon et al., 2019).

Training and professional development for ABA specialists also present stark disparities between the two countries. In the United States, ABA professionals follow a structured certification process through the Behavior Analyst Certification Board (BACB), ensuring adherence to evidence-based best practices (Bronfenbrenner, 2005). The availability of ongoing training, professional networks, and continuing education opportunities allows for skill refinement and professional growth. In contrast, Nigeria has a limited number of formally trained ABA practitioners, with many professionals relying on informal training, short-term workshops, or mentorship rather than standardized certification (Bakare & Munir, 2021). This limitation affects the quality and consistency of ABA interventions in Nigeria, as many professionals may not have access to the latest research or best practices in the field (Magana et al., 2019). Expanding structured training opportunities in Nigeria is essential to improving the quality of ABA interventions and ensuring that practitioners are equipped with the necessary skills to provide effective support for individuals with ASD.

Access to ABA resources further differentiates intervention practices in Nigeria and the United States. In the U.S., ABA services are widely available through government-funded programs, private therapy centers, and school-based intervention programs, ensuring that most individuals with ASD have access to structured services (Sue et al., 2019). However, financial constraints still exist, particularly for low-income families who may struggle to afford ABA therapy despite insurance coverage options (Zuckerman et al., 2021). In Nigeria, financial barriers are even more pronounced, with ABA therapy largely limited to private practice, making it inaccessible to most families (Igwe et al., 2020). Government support for autism interventions is minimal, and many families must rely on charity organizations or international funding to access therapy services (Ajuwon et al., 2019). Addressing these financial barriers and increasing government investment in autism care is crucial to ensuring that more children with ASD in Nigeria receive the support they need.

Despite these regional differences, the study also identified common challenges faced by ABA professionals in both countries. One shared challenge is the high cost of ABA therapy, which remains a significant barrier to accessibility, even in high-income settings such as the United States. In both countries, families struggle with the financial burden of long-term ABA interventions, which require consistent engagement over several years to yield significant results (Dillenburger, 2021). Additionally, societal stigma surrounding autism remains a concern in both Nigeria and the U.S., although it is more pronounced in Nigeria, where misconceptions about autism persist, leading to exclusion and limited social support (Igwe et al., 2020).

Conclusion

The study findings underscore the complex interplay between cultural values, professional training, parental involvement, and resource availability in shaping ABA interventions for ASD. While ABA professionals in the United States focus on individualized, strengths-based interventions that promote autonomy and self-advocacy, their Nigerian counterparts prioritize practical skill development and social adaptation. These differences reflect broader sociocultural and systemic factors that influence autism care in both countries. Addressing these disparities requires culturally responsive ABA models that integrate best practices while being adaptable to local contexts.

Recommendations

1. Expand ABA Training and Certification in Nigeria: Establishing standardized training programs and professional certification pathways for ABA practitioners in Nigeria would improve the quality of interventions and ensure alignment with global best practices.
2. Increase Public Awareness and Parental Engagement: Public education campaigns on autism and ABA can help reduce stigma, encourage early intervention, and improve parental involvement in therapy.
3. Enhance Government Support for Autism Interventions: Policymakers should allocate more funding for ABA services, ensuring that individuals from low-income backgrounds can access affordable and effective interventions.
4. Encourage Cross-Cultural Knowledge Sharing: Collaborative initiatives between ABA professionals in Nigeria and the United States can facilitate knowledge exchange, promote culturally adaptive ABA strategies, and enhance global best practices in autism care.

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Declaration

Ethics approval and consent to participate

This is not a clinical trial nor an intervention study, at such no ethical approval was needed for the study, however, consent was sort from all participants. All personal identifiers were eliminated from transcripts to ensure confidentiality, and participants gave their written and verbal informed consent. Due to the delicate nature of autism interventions, participants were made aware of their freedom to leave the study at any moment without facing any consequences.

Consent for publication

The authors gave their consent for the publication

Availability of data and materials

This is a qualitative study, and the thematic presentation of data is available

Competing interests

There is no competing interest

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Authors' contributions

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