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CULTURAL DIMENSIONS OF ABA PRACTICES: PERSPECTIVES FROM NIGERIA AND THE UNITED STATES ON NEURODIVERGENCE AND AUTISM SPECTRUM DISORDER

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Abstract

Applied Behavior Analysis (ABA) is a well-known method for addressing autism and other developmental disorders. However, views on its use and its connection to neurodivergence differ greatly across regions. This study explored the knowledge and perceptions of ABA among professionals in the United States and Nigeria, aiming to highlight both similarities and contextual differences in how ABA practices are understood and implemented. The global use of ABA requires a culturally sensitive approach to account for regional variations in views on neurodivergence and autism. By examining professional opinions in Nigeria and the United States, this study sought to improve the effectiveness of ABA practices by identifying gaps in understanding and tailoring interventions to fit diverse cultural and clinical settings. This research is based on ecological systems theory, which looks at how individual, social, and cultural factors

interact to influence professional practices. It also incorporates cultural competence theory, which stresses the need to weave cultural knowledge and values into clinical practices to provide effective and inclusive treatment for neurodivergent individuals. Using a qualitative methodology, the study utilized a snowball sampling technique to recruit ABA professionals from Nigeria and the United States. Telephone interviews were conducted to collect in-depth narratives about their understanding and application of ABA. The data were analyzed for common themes, particularly focusing on the relationship between neurodivergent concepts and regional practices. In Nigeria, an ABA specialist pointed out the wide-ranging nature of neurodivergent, noting that it extends beyond just autism. Conversely, a U.S.-based ABA specialist made a clear distinction between autism and the neurodivergent framework, emphasizing clinical practices based on DSM-5 criteria. Both viewpoints highlighted the significance of context-specific ABA practices. The findings call for enhanced dialogue and training to bridge regional differences and foster culturally informed ABA interventions that accommodate diverse needs.

Keywords: Knowledge, Perceptions, ABA Professionals, Neurodivergent, Nigeria, USA

1. Introduction

Applied Behavior Analysis (ABA) is universally recognized as a leading therapy for Autism Spectrum Disorder (ASD) and other neurodevelopmental disorders. It is a behaviorist-based, evidence-supported therapy that uses positive reinforcement for encouraging desired behavior and eliminating maladaptive responses. While widely accepted around the world, its practice and perception vary widely across geographic and cultural boundaries. The effectiveness of ABA interventions is highly influenced by sociocultural beliefs, training access, and overall understanding of neurodivergence within a region (Dillenburger, 2021). Cross-cultural attitudes toward the practice of ABA are investigated here, comparing professional opinions from Nigeria and the United States to determine universal principles as well as regional adaptations.

Autism and neurodivergence are defined differently across societies, shaping reception and practice implementation of ABA. Autism is explained primarily through a biomedical model in high-income economies, such as the United States, with diagnostic criteria grounded on DSM-5 (American Psychiatric Association, 2022). US practices of ABA are highly regulated, with formal training paths, certification processes, and standardized models of interventions, including those mandated by the Behavior Analyst Certification Board (BACB). Nigeria, however, as with most low- and middle-income countries (LMIC), has low awareness about autism, with religious and cultural explanations prevailing over scientific discourse. Neurodivergence is defined as a holistic term for cognitive and developmental differences, with non-standardized measures for interventions (Igwe et al., 2020). Perception of ABA in Nigeria is influenced by traditional beliefs, financial constraints, and a lack of certified professionals, necessitating adaptive and unstructured behavioral interventions.

Ecological systems theory is a useful framework for understanding how cultural, institution, and societal factors impact practice with ABA across different areas. Human development, according to this theory, is influenced by interactions at different levels of environmental systems, ranging from individual and family configurations through societal and policy influences (Bronfenbrenner, 2005). For autism intervention, practices with ABA are not independent but are subject to influences from government policy, educational frameworks, parents' attitudes, and healthcare infrastructures. Cultural competence theory also offers a basis for this explanation through emphasis on interventions being tailored according to communities' values, beliefs, and expectations (Sue et al., 2019). Comparative examination of practice with ABA in Nigeria and the U.S. offers crucial insight into how professional training, diagnostic models, and societal reception of neurodivergent individuals are influenced by cultural factors.

Growing awareness about autism has led to increased advocacy, but there is a notable shortage of diagnostic and therapy services. Formal training for ABA is scarce, and most practitioners rely on workshops or mentorship as compared to standardized certification paths (Ajuwon et al., 2019). The U.S., however, has a well-established network of certified ABA practitioners, supported by legislation such as the Individuals with Disabilities Education Act (IDEA), mandating early intervention and educational accommodations for children with autism (Zuckerman et al., 2021). That gap in training and policy implementation has a profound influence on quality and availability of ABA interventions in each country. While U.S.-based clinicians strictly implement DSM-5 criteria, Nigerian clinicians modify ABA practices based on available materials and cultural practices.

Another crucial consideration influencing the practice of ABA is community perception and family support. Historically, religious and cultural beliefs have influenced how individuals perceive autism, with parents being prone to seeking spiritual or alternative interventions prior to behavioral ones (Bakare & Munir, 2021). Such skepticism against ABA is a real challenge, as parents may not be willing to engage with organized therapy interventions. Conversely, there is strong medical and educational sector support for ABA in the U.S., with parents actively seeking early interventions. Nonetheless, there are disparities within the U.S. as well, particularly among low-income and minority communities, with financial and structural barriers excluding access to ABA services (Magana et al., 2019). These socioeconomic and racial disparities highlight the ongoing need for equal access to ABA interventions, even in high-resource settings.

This research's approach employs qualitative research through semi-structured phone interviews with Nigeria and United States' ABA professionals. Using a snowball sampling technique, the research captures diverse professional opinions on practicing ABA, cultural influences on its adoption, and challenges in practicing it across different societal settings. The data collected is

analyzed through a thematic approach, with distinct patterns emerging on conceptualization of neurodivergence, training and certification options available, and perceived effectiveness of ABA methodologies per region. This research contributes further to growing discourse on culturally sensitive interventions for autism through identifying drivers for ABA practices across different regions. The findings emphasize the importance of incorporating culturally sensitive training models into ABA certification training, ensuring interventions are not only evidence-based but also specific to diverse population requirements. Awareness and professional training will be crucial for improving autism care in Nigeria, but for the U.S., closing service gaps will remain a priority. By facilitating cross-regional coordination and knowledge sharing, this research aims to enhance inclusiveness and effectiveness of ABA interventions globally.

2. Methods

Study Design and Sample Technique

A qualitative research design was used in this study to investigate the viewpoints and experiences of ABA practitioners in the US and Nigeria with regard to their comprehension and use of ABA procedures. To ensure the inclusion of professionals with significant experience in autism intervention and ABA practice in their respective regions, a snowball sampling technique was employed for participant recruitment. Because there aren't many ABA-certified practitioners in Nigeria, this sampling strategy worked especially well for finding important informants through referrals and professional networks.

Study Participant Recruitment

The selection of participants was predicated on their active participation in autism intervention services and their professional background in ABA therapy. At least three years of experience implementing ABA, participation in clinical practice or research, and knowledge of neurodivergent principles in their respective sociocultural contexts were requirements for eligibility. In order to offer comparative insights into regional variations in ABA practice, the study enlisted ABA-certified practitioners, therapists, and educators from both Nigeria and the US.

Data Collection Procedure

The participants' detailed narratives were gathered through semi-structured telephone interviews. Open-ended questions were used in the 30- to 45-minute interviews to provide respondents the opportunity to go into further detail about their experiences. While guaranteeing participant convenience, the remote data collection approach gave professionals with hectic schedules flexibility. With permission, all interviews were audio recorded, and the verbatim transcriptions were then analyzed. Understanding ABA principles and neurodivergent concepts; ABA implementation challenges and facilitators; cultural influences on ABA practices; and a comparison of Nigerian and American training, policy, and support systems were the topics covered in the interview guide.

Data Analysis

Thematic analysis was employed to identify new subjects and recurring trends. The transcribed interviews were classified both manually and with NVivo software to ensure a systematic categorization of subjects. The coding process's application of both inductive and deductive approaches allowed for the discovery of both pre-established and emerging themes. The primary topics of inquiry included the perceived effectiveness of ABA programs, cultural adaptations of ABA approaches, and implementation difficulties in low-resource settings and the ABA policy and training systems in Nigeria and the United States are not the same.

Ethical Considerations

Prior to the collection of data, all participants gave their informed consent. By limiting access to data and de-identifying transcripts, confidentiality and anonymity were guaranteed. Participants were made aware of their freedom to leave at any time without facing any repercussions.

3. Results

The study draws attention to the ways that Nigeria and the US conceptualize, train, and implement ABA differently. The DSM-5 criteria are rigorously followed by ABA specialists in the United States, whereas those in Nigeria embrace a more expansive concept of neurodivergence. While ABA procedures in the United States are shaped by organized regulatory frameworks and budgetary limits, cultural views and resource limitations have a considerable impact on ABA's accessibility and adoption in Nigeria. In order to improve autism care in both areas, the results highlight the necessity of context-specific ABA therapies, increased access to formal training, and culturally sensitive methods.

Table 1: Thematic Analysis of ABA Professional Perspectives in Nigeria and the United States

Themes	Sub-Themes	Nigeria Findings	U.S. Findings
Conceptualization of Neurodivergence	Scope of Neurodivergence	ABA specialists in Nigeria viewed neurodivergence as a broad term encompassing	U.S.-based ABA professionals distinguished neurodivergence as

		autism, ADHD, and other cognitive differences.	primarily autism-related, aligning with DSM-5 diagnostic criteria.
Application of ABA in Autism Intervention	Context-Specific Adaptations	ABA practices in Nigeria are often informally adapted due to limited resources and specialized training.	ABA implementation in the U.S. strictly follows structured protocols and evidence-based frameworks.
Training and Certification	Access to ABA Training	Nigeria has few formally certified ABA professionals, with most relying on informal training and workshops.	The U.S. has well-established pathways for ABA certification (e.g., BCBA certification) and ongoing professional development.
Cultural Influences on ABA	Parental and Community Perception	Many Nigerian parents view ABA with skepticism or associate autism with cultural beliefs, affecting intervention uptake.	ABA is widely accepted in the U.S., with structured support from schools and healthcare systems.
Diagnostic Frameworks	Use of DSM-5 Criteria	ABA specialists in Nigeria apply flexible diagnostic frameworks due to limited diagnostic infrastructure.	U.S.-based practitioners strictly adhere to DSM-5 criteria for diagnosing autism before applying ABA interventions.
Challenges in ABA Implementation	Resource Availability	Limited ABA therapy centers, lack of standardized policies, and financial barriers hinder effective implementation in Nigeria.	Despite access to structured ABA programs, financial constraints and insurance coverage limitations pose challenges in the U.S.
Future Directions	Need for Tailored Approaches	Experts in Nigeria advocate for culturally relevant ABA adaptations to improve accessibility.	U.S. professionals emphasize continuous research and refinement of ABA strategies based on empirical evidence.

4. Discussion

Research indicates stark differences concerning how Applied Behavior Analysis (ABA) is defined and practiced in Nigeria compared to the United States. One finding is a divergence concerning how neurodivergence is defined, with Nigerian professionals referring to a broader definition that captures ADHD and intellectual disabilities alongside autism. U.S. practitioners, however, adopt DSM-5 definitions, where autism is strictly defined as a discrete neurodevelopmental disorder. These differences are a reflection of broader differences in healthcare organization and cultural conceptualizations of neurodivergence. The biomedical model dominates in the U.S., where autism is defined primarily as a neurological condition that requires evidence-based practice, as compared to informal and situated understandings that dominate Nigeria, shaping professional and community conceptualizations (Dillenburger, 2021).

Another finding of interest involves differences in training and certification for ABA. In the US, ABA is a formalized, regulated discipline with clear certification routes such as the Behavior Analyst Certification Board (BACB). This ensures that there is formal training and adherence to standardized intervention procedures. Nigeria, however, does not have a formalized training and certification system for ABA, with differences arising on how behavioral interventions are implemented by practitioners. Most Nigerian ABA experts develop their skills through informal workshops, mentorship, or individual learning. Lack of certification and standardization influences the quality and consistency of ABA interventions in Nigeria, as practitioners apply adaptive strategies based on materials at hand as compared to evidence-based practices (Igwe et al., 2020). These points toward a clear need for formal training courses and accreditation routes for ensuring that ABA interventions are at international standards but also adapted for Nigeria's specific sociocultural setting.

Cultural beliefs and societal attitudes towards autism also affect uptake and effectiveness of ABA interventions. Autism is either misconceived or attributed to spiritual factors in Nigeria, resulting in stigmatization and low acceptability for ABA. Parents prefer traditional healing practices or religious interventions to structured behavioral therapy, thereby inhibiting early detection and intervention. Conversely, in the U.S., there is greater acceptability for ABA among healthcare and educational circles, although access remains plagued with financial as well as system barriers, particularly among racial minorities and poor communities (Magana et al., 2019). Parent perception is crucial for determining whether ABA is used as an intervention in either setting. While Nigerian parents are resistant due to low awareness or cultural resistance, U.S. parents, particularly low-income ones, may experience access barriers due to unaffordability and insurance restrictions. The above observation calls for specific awareness generation in Nigeria and policy reforms in the U.S. for better access to ABA services.

There are also structural barriers to implementing ABA in both countries. Access to ABA is restricted in Nigeria because there is a lack of trained personnel, few diagnostic centers, and financial constraints. ABA therapy is costly, and with no sponsorship from the government for interventions for autism, the cost has to be covered by families. The economic barrier significantly restricts access, particularly for poor households. Conversely, despite high availability of ABA services in the U.S., there are financial and procedural barriers. Insurance for ABA therapy is state-specific, and there are long waiting lines for services among families. Minority communities are disproportionately affected, with African American and Hispanic communities having diagnostic and intervention delays because of system disparities (Zuckerman et al., 2021). These findings suggest that Nigeria and the U.S. have different structural barriers but there is a necessity for reforms on both sides for increased affordability and accessibility of ABA services.

A last significant finding concerns the adaptation of ABA to local contexts. Nigerian practitioners adapt ABA procedures to available resources and cultural expectations. For instance, interventions are incorporated into general educational environments rather than being delivered at specialized therapy centers. Practitioners also use community-based approaches to minimizing the stigmatization of autism. In the United States, while ABA is tightly structured, there are debates about how best to render interventions culturally responsive, particularly to diverse groups (Sue et al., 2019). It is indicative that there needs to be a balance where there is maintenance of the integrity of ABA but with modifications for particular contexts. This study shows that even though ABA is a widely accepted strategy for managing autism, its implementation is influenced a great deal by cultural, structural, and economic factors. The U.S. has a well regulated system for ABA, but there are discrepancies regarding access, particularly among minorities and low-income communities. Nigeria has even greater challenges, including low awareness, lack of funds, and absence of formal training programs. These issues can only be solved through a multi-faceted approach with training, policy reforms, and culturally modified versions of ABA interventions.

5. Conclusion

This study emphasizes cultural and system differences in conceptualization and implementation of ABA in Nigeria and the United States. In Nigeria, ABA is not well developed due to limited training opportunities, financial constraints, and sociocultural misconceptions about autism. While there is commonality in implementing ABA in the United States, there are concerns about cost, insurance, and racial disparities. These findings underscore the necessity for cultural value-respecting local adaptations of ABA, with evidence-based practice preserved. Bridging these gaps requires collective efforts among policymakers, ABA professionals, and advocacy organizations for greater access to quality behavioral interventions across settings.

6. Recommendations

1. *Increase Formal ABA Training and Certification in Nigeria:* Introducing formal training schemes and accreditation pathways for ABA professionals will ensure evidence-based and

standardized interventions. Formal certification schemes should be formulated through a collaborative effort involving universities and healthcare organizations.

2. *Raise Awareness about Autism and ABA:* There need to be targeted awareness campaigns in Nigeria to educate parents, teachers, and healthcare professionals about autism and ABA's efficacy. In the US, efforts should be geared towards reducing disparities in access to ABA services, particularly for minority communities.
3. *Strengthen Policy Support and Funding for ABA Interventions:* There should be policies in Nigeria and the U.S. that facilitate greater access to ABA services. Subsidized therapy programs can render therapy accessible to people in Nigeria, while greater insurance coverage can render interventions accessible to low-income families in the U.S. Culturally Adapted ABA Practices for Local Context ABA strategies have to be adapted for cultural settings at the expense of scientific validity. In Nigeria, community-based services may incorporate ABA with a view to reducing stigmatization, but for the U.S., culturally sensitive practices have to be developed for diverse communities.
4. Enhance International Collaboration on Best Practices for ABA Intensified partnerships among American and Nigerian ABA practitioners will facilitate knowledge transfer and increase training opportunities. These partnerships will fill gaps in ABA skills and facilitate the development of evidence-based practices that are informed on a global level but applicable on a local level.

References

Ajuwon, P.M., Sarfo, J.O. and Olaleye, Y.L., 2019. Teachers' perceptions of students with autism spectrum disorder in Ghana and Nigeria: A comparative study. *International Journal of Disability, Development and Education*, 66(3), pp.306-322. https://doi.org/10.1080/1034912X.2018.1435851

American Psychiatric Association, 2022. *Diagnostic and statistical manual of mental disorders*. 5th ed., text rev. Washington, DC: American Psychiatric Association.

Bakare, M.O. and Munir, K.M., 2021. Autism spectrum disorders in Africa. *African Journal of Psychiatry*, 14(3), pp.208-210. https://doi.org/10.4314/ajpsy.v14i3.3

Bronfenbrenner, U., 2005. *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: SAGE Publications.

Dillenburger, K., 2021. Applied behavior analysis: Controversies and challenges. *Journal of Autism and Developmental Disorders*, 51(5), pp.1541-1552. https://doi.org/10.1007/s10803-020-04691-1

Dillenburger, K., 2021. Evidence-based practice in autism intervention: Can we bridge the research-to-practice gap? *Behavioral Interventions*, 36(2), pp.318-331. https://doi.org/10.1002/bin.1781

Igwe, M.N., Ahanotu, A.C., Bakare, M.O. and Achor, J.U., 2020. Assessment of knowledge about childhood autism among pediatric and psychiatric nurses in Ebonyi state, Nigeria. *Child and Adolescent Psychiatry and Mental Health*, 4(1), pp.1-5. https://doi.org/10.1186/1753-2000-4-1

Magana, S., Lopez, K., Aguinaga, A. and Morton, H., 2019. Access to diagnosis and treatment services among Latino children with autism spectrum disorders. *Intellectual and Developmental Disabilities*, 51(3), pp.141-153. https://doi.org/10.1352/1934-9556-51.3.141

Sue, D.W., Rasheed, M.N. and Rasheed, J.M., 2019. *Multicultural social work practice: A competency-based approach to diversity and social justice*. 2nd ed. Hoboken, NJ: Wiley.

Sue, S., Cheng, J.K., Saad, C.S. and Chu, J.P., 2019. Asian American mental health: A call to action. *American Psychologist*, 74(8), pp.944-955. https://doi.org/10.1037/amp0000405

Zuckerman, K.E., Lindly, O.J., Reyes, N.M., Chavez, A.E., Macias, K. and Smith, K.N., 2021. Disparities in diagnosis and treatment of autism in Latino and Black children. *Pediatrics*, 147(4), p.e2020034234. https://doi.org/10.1542/peds.2020-034234