The Impact of Migration on Language Development: A Paedolinguistics Study of Child Language Acquisition among African Families in Diaspora

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Abstract

African migration has become a notable development in the modern age. With the increasing movement of African families to various parts of the world in search of greener pastures, children are often raised in a multicultural context, leading to linguistic hybridity. Specifically, this research studied some online content via selected social media: Facebook, Instagram, and YouTube, with a view to examining the linguistic utterances of African children in the diaspora, aged 4-12years old. It focused on how migration shaped their language acquisition, its use, and the formation of their linguistic abilities. Using Language Contact and Sociolinguistic Variation Theories by Fishman (1968) and Labov (1972), this research examined the proficiency and the linguistic patterns of ten selected second-generation children of African origin in America and Europe. The study examined how they navigate linguistic spaces and negotiate their identities amid language contact. In addition to the social media data, some diaspora children were also studied through phone conversations, including audio and video calls, to enable more accurate and contextual analysis. It employed empirical case studies and a comprehensive review of the existing literature to investigate factors influencing language use among Nigerian children in the diaspora. However, the study found that language shift is a common phenomenon, with many migrants abandoning their native languages for dominant languages such as English or French. This act is driven by social and cultural factors, leading to the creation of new linguistic forms and identities, such as a hybrid accent. Consequently, this results in a blend of migrants' native accents with those of their host communities.

Keywords: Migration, Paedolinguistics, Language Acquisition, Language Shift, Language Use, Child Development.

Introduction

In recent years, African migration to Europe, North America, and other parts of the world has become a prominent global phenomenon. This development is largely driven by economic aspirations, educational opportunities, and political instability (Adepoju, 2021; IOM, 2023; Adepoju, 2018). However, this migratory trend has led to multicultural environments in which children are frequently exposed to multiple languages and cultural practices from an early age. Such settings intensely influence language development, as children navigate between their native languages and the dominant languages of their host countries. The process of language acquisition in migrant children is complex, shaped by various social, cultural, and linguistic factors. This, however, is a vital area of study within paedolinguistics; a branch of linguistics which focuses on language development in children (Kirk, 2020).

African migrant children often grow up in linguistically and culturally hybrid

environments, where their acquisition and use of language are shaped by both their native language and the dominant language(s) of the host country. Language development is expressly critical during childhood, as it is intricately connected to cognitive growth, identity formation, social integration, and academic performance (Paradis, 2016). Paedolinguistics, a branch of linguistics, studies child language and how young children acquire, adapt to, and negotiate language in diasporic settings.

Despite the expanding body of literature on bilingualism and multilingualism, little empirical attention has been paid to language development among African children in the diaspora and how migration influences their linguistic trajectories. Many migrant children often neglect their native languages, adopting the host country's main language, which consequently leads to language attrition and loss of cultural identity (Omonijo & Oluwadare, 2021). This neglect raises questions about the implications for their linguistic proficiency and identity formation. Also, the influence of social media and online interactions as contemporary platforms for language use among children remains underexplored, yet it plays a crucial role in shaping their linguistic skills and identities. Hence, this study seeks to fill this gap by examining the influence of migration on the language development of the African migrant children in the diaspora. This study is significant because language is central to culture and identity. Hence, understanding how migrant children navigate linguistic spaces is crucial for promoting inclusive language practices and preserving linguistic heritage (De Houwer, 2020).

Research Objectives

This study addresses the linguistic consequences of migration on second-generation African children, particularly those aged 4–12 years, and how their exposure to multicultural environments leads to phenomena such as language shift, hybrid accents, and identity reformation. The study seeks to answer the following question: How do these children sustain or abandon their native languages? What role does the dominant societal language, like English, play in their linguistic development? These questions will guide the study's objectives and inquiry.   However, the objectives are:
  i.   to examine how migration affects language acquisition among African children in diaspora.
  ii.   to investigate the degree of language shift or maintenance among the African migrant children in the diaspora.
  iii.   to explore how multicultural contexts influence the children's linguistic identities.

Theoretical Framework

Joshua Fishman's theory of language contact (1968) and William Labov's sociolinguistic variation theory (1972) is foundational in understanding how language acquisition and usage are influenced by social contexts, particularly among second-generation immigrant children. Fishman's Theory of Language Contact emphasised

the dynamics of language maintenance and shift within multilingual societies. He introduced the concept of "domains of language use," illustrating how different languages are employed in specific social contexts, such as home, school, or religious settings. This framework is pivotal in paedolinguistics, as it sheds light on how children navigate multiple languages based on context. Fishman's work is particularly relevant to second-generation children who often balance their heritage language at home with the dominant language of their host country in public spheres.

Labov's Sociolinguistic Variation Theory focused on the systematic variation of language within speech communities. He introduced the concept of the "sociolinguistic variable," demonstrating that linguistic features vary systematically with social factors like class, age, and gender. Labov's studies, such as his work on the Lower East Side of New York City, revealed that language change often originates from the middle socioeconomic classes; a concept known as the "curvilinear principle". In the context of language acquisition, Labov's findings suggest that children learn not only the grammatical rules of a language but also its social nuances, adapting their speech based on their social environment.

Both theories underscore the importance of social context in language development. Fishman's emphasis on domains highlights how children's language use is compartmentalised based on social settings, influencing their proficiency in each language. Labov's insights into sociolinguistic variation reveal that children are sensitive to social cues and adjust their language accordingly, a process that begins early in life. Together, these two theories provide a comprehensive understanding of how second-generation children acquire and use language, balancing their heritage and host country languages in response to social factors.

Literature Review

Global Trends in African Migration

Recent global trends in African migration reveal a dynamic, varied landscape shaped by economic, political, environmental, and social factors (Akpuokwe, Eneh, Adeniyi, and Bakare, 2024). African migration is increasingly marked by both intracontinental and intercontinental movements. Over 80% of African migrants remain on the continent, drawn by possibilities in adjacent nations (IOM, 2024). However, migration to Europe, North America, and the Gulf States has increased due to continuing inequities, violence, and climate change (UNHCR, 2023).

Economic aspirations and the search for better livelihoods remain primary motivators. Moreover, climate-induced displacement is rising, with the Sahel region particularly affected by desertification and food insecurity (World Bank, 2023).

Additionally, restrictive visa policies in the Global North have contributed to irregular migration and the rise of human smuggling networks (Migration Policy Institute, 2024). Notably, African migration is not solely composed of low-skilled labourers; there is an increasing trend of highly educated professionals leaving the continent, contributing to the so-called "brain drain" (OECD & IOM, 2023). However, African migratory patterns have generally exhibited both systemic issues and resilience, necessitating multinational policy responses that balance human rights, security, and development.

Migration and Childhood Language Development

Migration plays a critical role in shaping childhood language development, especially within the field of paedolinguistics. When children migrate either with families or as unaccompanied minors, they often experience a shift in linguistic environments that can significantly impact both first and second language acquisition. According to the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2023), migrant children frequently face challenges in maintaining their mother tongue while simultaneously learning the dominant language of the host country, which can lead to bilingualism and identity tension.

Research shows that early exposure to multiple languages can enhance cognitive flexibility, but only if linguistic support is available (European Commission, 2022). In many cases, however, migrant children struggle academically due to insufficient support in their first language, which can delay literacy development and impede educational outcomes (Cummins, 2021). Paedolinguistic studies emphasise the importance of maintaining the home language to support identity formation and facilitate additive bilingualism, where the second language enhances rather than replaces the first. Nevertheless, effective language policies in schools and communities, such as mother tongue-based multilingual education, are essential for ensuring positive linguistic and developmental outcomes for migrant children.

Paedolinguistics and Diaspora Linguistic Behaviour

The study of how children learn and use language is known as paedolinguistics. Children from diaspora communities frequently grow up in bilingual settings, navigating between the society and their heritage language or languages. Their identity, cognitive results, and language development are all greatly influenced by this dynamic. According to studies, diaspora children frequently encounter a diglossia scenario in which the societal language, such as English, French, or Dutch, dominates public and educational contexts, while the home language, such as Yoruba, Igbo, or Amharic, is used in private settings (Anderson et al., 2022). If heritage language maintenance is not encouraged, this may lead to bilingualism, which can cause language change or even loss. De Houwer (2021) emphasises that sustained input in both languages is critical to achieving additive bilingualism, in which the second language is acquired without loss of the first.

From a paedolinguistic perspective, language acquisition among diaspora children is not only cognitive, but also social and emotional. Heritage language proficiency reinforces cultural identity and family bonds, while a lack of proficiency can create intergenerational communication gaps (Aronin & Singleton, 2018). For African diaspora communities, maintaining indigenous languages is particularly challenging due to limited institutional support and societal pressure to assimilate linguistically. However, linguistic behaviour in diaspora children is often adaptive. Research indicates that children may engage in code-switching and translanguaging fluidly, drawing from both linguistic repertoires depending on context and interlocutor (Canagarajah, 2018). These practices are not signs of confusion, but of linguistic competence and identity negotiation. Cummins (2021) argues that bilingual education and culturally relevant pedagogy are essential tools for promoting balanced bilingualism. Without such frameworks, diaspora children risk academic underachievement and identity dislocation.

Digital Spaces and the Promotion of Indigenous Languages

Contemporary paedolinguistic research increasingly recognises the role of digital spaces as supplementary sites for heritage language acquisition and maintenance (Obojska & Vaiouli, 2023; Nikolopoulou, 2024; Mütterlein, J., & Fuchs, C., 2019). Although ethnographic studies have observed families sharing videos, music, and language-learning apps online, few platforms have been systematically evaluated in academic research. For example, Botangen and Yu (2018) analysed Facebook groups among the Igorot community in North America, finding that migrants use social media to exchange, revitalise, and practice indigenous cultural and linguistic knowledge, thereby reinforcing identity and bridging intergenerational gaps. Similarly, digital storytelling workshops involving First Nations communities in Canada have been shown to enhance both language learning and cultural engagement through interactive multimedia productions. Ryan's (2016) MA thesis examined how digital storytelling can function both as a creative learning tool and a repository of cultural knowledge. She found that participants in Indigenous communities experienced increased confidence, improved literacy skills, and deeper emotional connections to their heritage languages.

Although systematic quantitative research on heritage language social media use remains limited, surveys of family language practices suggest that digital communication tools such as messaging apps and online story-sharing are being integrated alongside traditional home-based teaching, especially in-migrant families where formal language instruction is limited. Also, Wang & Hamid (2022) demonstrate that microlearning formats such as short, contextualised video modules support retention and motivation among diaspora children, often outperforming

traditional classroom-only approaches. They note that Short-form, thematic media content, such as a 60-second rhyme or conversational clip, provides heritage learners with high-density exposure without cognitive overload. Although academic evaluations of specific channels, such as "Akan Twi with Nana" or "@TalesFromNaija," remain sparse, user-generated testimonials and community feedback suggest their effectiveness. For example, social-media users often remark that Twi-learning YouTube channels in story-and-song formats make language acquisition feel "super relaxed" and culturally rooted. This, however, supports broader findings that culturally immersive, narrative-based digital content aligns closely with what is known about effective childhood language learning. As Cummins (2021) and De Houwer (2023) argue, heritage language development thrives not just on exposure but on meaningful, identity-linked interaction, which these platforms sometimes actively promote.

While traditional heritage-language research emphasises family language policy and home-based transmission (Fishman, 1989; Wang & Hamid, 2022), recent work highlights the transformative role of digital platforms. Technology-enabled tools are increasingly recognised as effective resources for heritage language maintenance and revitalisation, particularly among diaspora communities (Salazar et al., 2021; Wang & Hatoss, 2024). A study on Yoruba–English bilingual immigrants in the U.S. demonstrates the centrality of heritage language within digital and social media spheres (Wang, 2023). Similarly, research conducted with Ukrainian-Macedonian diaspora learners identifies interactive digital formats, especially gamified learning, as effective in maintaining linguistic skills among young children abroad.

Diving into specific cases, platforms such as @IgboChildrenZone on Instagram leverage bilingual (Igbo–English) nursery rhymes, cultural facts, and interactive content. These mirror the benefits of heritage-language exposure among children, enhancing lexical recall and cultural identity (Dash, 2024). Akan Twi with Nana, a Ghanaian YouTube channel, uses illustrated storytelling and songs to support the acquisition of the Twi language. Such audiovisual immersion aligns with documented optimal conditions for paedolinguistic development: repeated, meaningful exposure in relatable contexts (Salazar et al., 2021).

The African Language Project, spanning Facebook and YouTube, offers materials in Yoruba, Hausa, Swahili, Zulu, and others. This aligns with current heritage-language policy literature, which advocates for multilingual digital toolkits to support intergenerational language maintenance in diaspora settings (Wang & Hatoss, 2024). @SwahiliShule on Instagram and TikTok uses microlearning videos and interactive skits to teach Swahili conversational skills. This mode has been praised for its motivational and memory-enhancing benefits, core strengths of digital informal learning formats (Salazar et al., 2021). @TalesFromNaija utilises TikTok to share Nigerian folktales, proverbs, and riddles in languages like Edo, Efik, and Yoruba. Folkloric content broadcast digitally supports paedolinguistic outcomes in oral

narrative competence, reinforcing cultural literacy among diaspora children (Salazar et al., 2021; UNESCO, 2023). Together, these platforms transform heritage language engagement from passive reception to interactive participation. The trend aligns with research advocating digital strategies in Indigenous and endangered-language contexts, such as those documented in Latin American, North American, and Australian settings, validating the positive impact of digital resources on language retention and emotional identity (Dash, 2024).

Digital strategies also help mitigate common factors driving the diaspora language shift by offering structured, engaging indigenous-language content that complements family-driven approaches. This contributes to additive bilingualism, helping children maintain a strong heritage-language foundation while integrating into the dominant-language society (Cummins, 2021; De Houwer, 2021).

From the foregoing examples of digital space engagement, it is evident that digital space has become a powerful tool for the promotion and revitalisation of indigenous languages, especially among diaspora communities where face-to-face transmission is often weakened by distance and assimilation pressures. Such spaces provide informal but impactful opportunities for children to hear, use, and interact with their native languages in real-world scenarios beyond the home. Studies focusing on African diaspora contexts further illustrate these dynamics. For example, Kupolati (2024) documents Yoruba–English bilingual immigrants in the United States, showing how digital and social media spaces (e.g., Facebook groups, YouTube channels) become critical domains for Yoruba maintenance. One notable exemplary platform is the Masoyinbo page on Facebook, a unique language challenge forum that immerses participants in real-time Yoruba language use (Masoyinbo, 2024). On this platform, the host presents questions in Yoruba and participants are required to respond entirely in Yoruba throughout the session. A strict rule governs the challenge: any use of English, even a single word, results in a monetary deduction from the contestant's potential reward. This format gamifies language learning and use, encouraging fluency, quick thinking, and pride in proficiency in an indigenous language. Notably, *Masoyinbo* functions not only as entertainment but as a digital language immersion model that supports active recall and functional usage, especially among young speakers and diaspora audiences who may not use Yoruba as their dominant language. These practices echo wider global findings that multimedia, narrative-based content strengthens children's lexical recall, cultural literacy, and engagement with oral traditions (Salazar et al., 2021; UNESCO, 2022).

Previous Studies on African Children in the Diaspora

Previous studies on African children in the diaspora highlight the complex interplay amidst migration, language acquisition, and identity development, particularly within the field of paedolinguistics. African migrant children often grow up in multilingual

settings, switching between their native languages and the main languages of their host countries. This dual linguistic environment presents both opportunities and challenges for language development and educational achievement.

A key theme in the literature is the tension between language maintenance and language shift. Research by De Houwer (2021) notes that African diaspora families often face difficulties in transmitting their home languages to children due to dominant societal pressures and institutional neglect of minority languages. Similarly, a study by Aronin and Singleton (2018) finds that many African children in Europe and North America experience subtractive bilingualism, where proficiency in their first language diminishes as they acquire the host country's language.

Language loss has significant implications for identity, as language is deeply tied to cultural heritage (Ajala, Adeyanju and Adebagbo, 2025). Studies such as those by Cummins (2021) argue for the importance of additive bilingualism, in which maintaining the first language alongside the second language enhances cognitive, academic, and emotional development. African parents in the diaspora often seek to reinforce language transmission through community schools, cultural events, and faith-based institutions, although these efforts vary widely in success (Judge, 2025)

In educational settings, African migrant children may be misidentified as having learning difficulties due to limited proficiency in the dominant language, despite strong cognitive abilities in their home language (UNESCO, 2023). Paedolinguistic research emphasises that early and consistent exposure to both languages, with appropriate scaffolding, supports balanced bilingualism and long-term academic success.

Methods and Materials

This study adopts a qualitative, interpretive research design, drawing on digital ethnography and longitudinal case studies to explore how migration affects language acquisition and identity among African children in the diaspora. Guided by Fishman's (1989) Language Contact Theory and Labov's (1972) Sociolinguistic Variation Theory, the study investigates how migrant experiences and multicultural exposures influence linguistic outcomes, particularly focusing on language shift, hybridisation, and identity negotiation.

Data Collection and Sources

Data for this study were sourced from two complementary streams, viz, online content (digital ethnography) and case studies (via telephone conversations). The first source consists of observational data from social media platforms such as Facebook, X (formerly Twitter), and YouTube. The data were publicly accessible and involved

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African children (ages 4–12) in diaspora contexts (particularly North America and Europe), which were purposively selected for their relevance to this study. Emphasis was placed on videos and posts where children speak informally, engage with peers, or interact with family in multilingual contexts. This allowed for the identification of language patterns such as code-switching, code-mixing, lexical borrowing, and pronunciation shifts indicative of hybrid accents or language attrition. The second source involves two sets of migrant children from Nigeria who relocated with their families to North America under different historical and developmental contexts:

Set A (Canada, 2021): Two children, aged 1 and 3 at the time of migration, were observed over regular telephone conversations with the researcher for over two months. These interactions provided current, naturalistic insights into their language usage, comprehension patterns, and negotiation between Nigerian language(s) and Canadian English. Set B (United States, 2002): Three children, aged 12, 15, and 17 at the time of migration, are now young adults and also engaged in bi-weekly telephone conversations over a two-month period. Despite their adult status, their migration occurred during a linguistically formative stage, before full language fossilisation. Their reflections on past and present language use, accent retention, and shifting cultural identities provided retrospective yet relevant data to complement the primary focus on younger children. In both cases, no formal interviews were conducted; instead, the researcher engaged participants in open-ended, organic conversations that were not recorded but meticulously documented in post-conversation field notes and reflective memos.

Sampling Criteria

The online data were sourced purposively with five children selected from digital content based on clear indicators of African heritage, diaspora residency, and linguistic performance in either English or native African languages. The case study participants were selected using convenience sampling. Five participants across the two migration cohorts were selected based on accessibility, willingness to engage, and parental consent (for minors in Set A).

Data Analysis

Data were analysed using thematic content analysis, focusing on recurring linguistic features such as:
Frequency and function of code-switching and code-mixing, pronunciation and intonation patterns indicating hybrid accents, language choice in varying contexts (home vs. school vs. online), evidence of language shift, attrition, or maintenance and expressions of identity through language use. Both direct linguistic performance

(observed in digital content and telephone interactions) and meta-linguistic commentary (such as comments, captions, or participant reflections) were coded and categorised. Comparative analysis was conducted between the two sets of migrant children to identify generational or situational variations in language retention and adaptation.

Ethical Considerations

All online content used in this study was publicly accessible and anonymised for ethical compliance. For the telephone-based case studies, parental consent was obtained for minors, and assent was sought from the children. No personally identifying information is included in this research. Field notes were securely stored in a password-protected online archive and used solely for academic analysis.

Data Presentation

Table 1: Demographic Profile of the Participants

Partici pant ID	Data Source	Location	Age at Migratio n	Current Age	Gen der	Migrat ion Year	Observa tion Period	Notes
D1–D5	Digital Ethnogr aphy	North America/E urope	1–12 (approxi mate)	4–12	Mixe d	Not specifie d	Based on social media content	Observed via social media; anonymis ed; linguistic behaviou r inferred from public videos/p osts
C1	Case Study (Set A)	Canada	1	5 (approxi mate)	Male	2020	2 months (2025)	Regular phone conversat ions; naturalisti c language use
C2	Case Study (Set A)	Canada	3	7 (approxi mate)	Male	2020	2 months (2025)	Regular phone conversat ions;

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Participant ID	Data Source	Location	Age at Migration	Current Age	Gender	Migration Year	Observation Period	Notes
								naturalistic language use
C3	Case Study (Set B)	United States	12	34 (approximate)	Female	2002	2 months (2025)	Adult reflection on childhood migration and language shift
C4	Case Study (Set B)	United States	15	37 (approximate)	Female	2002	2 months (2025)	Adult reflection on childhood migration and language shift
C5	Case Study (Set B)	United States	17	39 (approximate)	Male	2002	2 months (2025)	Adult reflection on childhood migration and language shift

Source: Authors' Construction

The study's participants are organised into two main groups based on the nature of data collection: digital ethnography and case studies. Participants D1–D5 are anonymised individuals selected from publicly accessible digital content on social media platforms such as Facebook, X (formerly Twitter), and YouTube. These children, aged approximately 4 to 12, were observed in informal, naturalistic interactions that revealed patterns of bilingual expression, code-switching, code

mixing and accent variation. Because they were not directly contacted or formally profiled, their demographic details, such as age, location, and linguistic background, were estimated through contextual and visual cues present in the videos. This approach ensured observational validity while maintaining ethical distance.

Participants C1–C5 were drawn from two purposefully selected case study cohorts, both involving Nigerian children who migrated to North America but under different historical circumstances. Set A includes two recent child migrants (C1 and C2) who moved to Canada in 2020 and were observed through regular phone conversations with the researcher over a two-month period. Set B includes three individuals (C3–C5) who migrated to the United States as adolescents in 2002 and, now adults, reflected on their earlier language adaptation experiences. While the conversations were not recorded, detailed field notes were taken to capture linguistic and identity-related insights. In both groups, gender has been deliberately left unspecified to preserve anonymity, and current ages, when referenced, are approximated solely to aid contextual interpretation and may be omitted in formal reporting if necessary.

The inclusion of adolescent participants aged 12 to 17 in this study is justified within the scope of paedolinguistics, particularly given the transitional and formative nature of language development at this stage. Although paedolinguistics is traditionally associated with early childhood (0–12 years), the discipline also encompasses the linguistic experiences of adolescents, particularly during significant developmental, social, or environmental changes. In migration contexts, adolescents are especially susceptible to shifts in linguistic behaviour, identity negotiation, and bilingual adaptation, all of which fall squarely within the domain of paedolinguistic inquiry.

In the present study, the three adolescent participants migrated during their teenage years, a period marked by ongoing cognitive and linguistic development. Their inclusion is crucial for examining how language acquisition and usage are influenced not only by age but also by the sociocultural upheaval associated with relocation. Unlike younger children, adolescents possess the cognitive maturity to reflect on their language experiences, offering meta-linguistic commentary that enriches the qualitative data. These reflections provide insight into both the retention of native linguistic structures and the adaptation to dominant languages in host countries, thereby offering a more comprehensive view of the dynamics of language shift and identity formation across age groups.

Therefore, while adolescents may sit at the upper boundary of paedolinguistics, their role in this study is not only valid but essential. Their developmental stage offers a unique lens for understanding the long-term impact of migration on language use, including processes of attrition, hybridisation, and cultural alignment. By bridging early childhood experiences with adult linguistic identity, these participants contribute meaningfully to the broader aims of paedolinguistic research.

Data Analysis

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The Data Collection and Sources presented in section 4.1 build on the demographic profile of the selected African children in the diaspora previously outlined. Guided by a qualitative, interpretive methodology, the analysis draws on digital ethnography and case-study cohorts to provide insight into linguistic adaptation and identity negotiation in multicultural contexts. The data comprises publicly available social media content and some field notes from open-ended telephone conversations with migrant children from four distinct cohorts. Thematic content analysis was employed to identify patterns such as bilingualism, code-switching and code mixing, phonological variation (hybrid accents), language shift, and expressions of cultural identity. By comparing linguistic behaviours across different age groups and migration timelines, this section highlights the complex, evolving interplay between language and identity in diasporic experiences.

Table 2: Comparative Linguistic Profiles of Yoruba–English Migrants from Digital Ethnography and Case Studies

ID	Age	Observation Type	Code Switching/ Mixing	Phonetic Re[presentation	Phonology /Morphology	Syntax/Semantics	Identity Markers
D1-D5	1–12 (approx.)	Social media	Frequent English–Yoruba switching; conversational shifts	Hybrid accents, especially diphthongs; influence of host language phonetics	Use of simplified Yoruba morphemes; English affixation on Yoruba roots	Occasional syntactic transfer (e.g., subject-verb-object inversion); limited semantic range in Yoruba	Use of English for abstract ideas, Yoruba for emotion; clear identity negotiation visible
C1	1	Case Study (Set A)	Basic Yoruba with embedded English phrases	Softened Yoruba consonants (e.g., /gb/, /ʂ/)	English morphological structures dominate	Grammar errors in Yoruba (tense, negation)	Strong preference for English; Yoruba linked to home/family
C2	3	Case Study (Set A)	Alternates per context; English	Signs of accent levelling;	Yoruba words truncate	Switching between English and	Emerging bilingua

			dominates in narrative speech	vowel shifts	d or anglicized	Yoruba syntax mid-sentence	l identity; playful use of Yoruba
C 3	12	Case Study (Set B)	Reports initial dominance of Yoruba, now rare	English L1 accent with residual Yoruba intonation	Occasional Yoruba compound forms used metaphorically	Syntactic fluency in English; Yoruba more formulaic	Identity shift to Canadian English user; nostalgic ties to Yoruba
C 4	15	Case Study (Set B)	Conscious avoidance of Yoruba; uses select expressions	North American accent; Yoruba tonal loss	Morphological loss in Yoruba; retains greetings	Predominantly English syntax; Yoruba used for familial roles	Views Yoruba as "cultural" but not "functional"
C 5	17	Case Study (Set B)	Rare Yoruba usage; more reflective use	Strong English phonetic influence; Yoruba phonemes weakened	Loss of morphological productivity in Yoruba	Very limited Yoruba syntax; semantically vague	Bilingual but identifies primarily with English

Source: Authors' construction

Bilingualism, the ability to use two languages with varying degrees of proficiency (Ajala & Adeniji, 2025), is a core feature among all participants, though with varying degrees of dominance. The study vividly demonstrates that second-generation African children in diaspora typically acquire bilingual competencies, albeit unevenly. Children who migrated at an early age (such as participants D1–D5 and C1–C2) exhibit dynamic bilingualism, often using English and Yoruba interchangeably. Participants D1–D5 (aged 1–12 at migration) demonstrate active bilingualism, using both English and Yoruba across informal digital spaces such as social media. This context encourages a dynamic, fluid use of language, where both languages coexist naturally: their parents speak to them in their native language, and they respond, switching to English intermittently.

In contrast, case study participants such as C3 (age 12) and C5 (age 17) exhibit signs of recessive bilingualism, in which the minority language (Yoruba) gradually gives way to the dominant language (English) under environmental and social pressures. For example, C3 initially spoke Yoruba fluently but now only uses it metaphorically

or nostalgically, indicating a loss of functional fluency. Younger case study participants, such as C1 (age 1) and C2 (age 3), demonstrate emergent bilingualism, in which English becomes the dominant language from early childhood, while Yoruba is learned only in family contexts. C1's language use reflects early acquisition of English structures, with limited yet meaningful Yoruba insertions.

Code-switching (alternating between languages) and code-mixing (blending elements from different languages within a sentence or phrase) are also central to the linguistic behaviour of all participants, though with different functions and frequencies. For participants D1–D5, code-switching between English and Yoruba is frequent and situational, especially in digital conversations. An example is a social media post in which a participant told his illiterate grandmother over the phone, "Grandma, mo pe yin, mo pe yin, e check phone yin, you will see that I called." This sentence fluidly mixes English and Yoruba. C2 (age 3) exemplifies context-sensitive code-switching: English dominates narrative and public speech, but Yoruba surfaces during private interactions. For instance, C2 once told me on the phone, "Aunty, mo n play video game mi" (meaning "I am playing my video game" in Yoruba).

Labov's sociolinguistic theory is evident in how diaspora children adjust their language to the setting. The data shows frequent and situational code-switching. I witnessed another instance when I was on a video call with the mother of one of my participants, C2 (age 7 now) uses English during play with peers (a video recording in his school) but switches to Yoruba during conversational exchanges at home: "Mummy, I want popcorn… e jọ̀, give me some." This fusion of politeness markers in Yoruba ("e jọ̀") into English speech illustrates children's capacity to respond to social cues. C5 (age 17 at the time of migration), on the other hand, rarely switches when I am in a phone conversation with her. Back then in Nigeria, we communicated mostly in Yoruba. Presently, she uses Yoruba language for reflective or symbolic purposes, suggesting diminished practical use. These patterns reflect not confusion but social pragmatism. This is because children align language with context and interlocutors, an adaptive linguistic behaviour often seen in multicultural settings.

The study also highlighted phonological development among the participants. There were phonological restructurings that display significant influence from host-country phonetics, resulting in hybrid accents. D1–D5 exhibit diphthong simplification. For instance, Yoruba words like "àìní" (lack) become "ay-nee" or even "eh-ee-nee," flattening the tonal richness. C1, despite being born in Nigeria, now softens Yoruba consonants like /ṣ/ (as in "ṣé") into more English-friendly sounds like /s/, making "ṣé o wa dada?" (Hope you are very fine) sound like "se'o wa dada?"

This phonetic restructuring is linked to limited exposure to native pronunciation in home environments and a dominant use of English at school. Tonal loss among older participants, such as C4, has led to semantic confusion, reducing communication

effectiveness in the heritage language. Phonological features, especially hybrid accents, reflect how the host language reshapes speech patterns. For D1–D5, hybrid accents emerge through diphthong simplification and vowel shifting, influenced by the host country's phonetic system. For example, the Yoruba diphthong "ai" in "àinf" (lack) is pronounced with a flatter vowel as in "eh-ee-nee," showing phonetic compromise.

The participants exhibited language shift, a process in which a community gradually transitions from using one language to another, often due to social, economic, or cultural influences. This is particularly evident among participants who migrated at older ages (C3–C5). C3's narrative shows an initial dominance in Yoruba, which faded over time, replaced by English fluency and only residual Yoruba use, often in formulaic expressions. C4 and C5 show an even more pronounced shift. C4 consciously avoids Yoruba except for culturally "appropriate" expressions like greetings ("ẹ káàrọ̀" for "good morning"), indicating a shift toward viewing Yoruba as symbolic rather than functional. C5 rarely uses Yoruba and struggles with basic syntax and semantics, highlighting an advanced stage of language shift. Meanwhile, D1–D5, though bilingual, show signs of slow language shift in grammatical structures: simplified Yoruba morphology and occasional syntactic errors, such as "mo go school" (I went to school), which reflects English influence on Yoruba sentence construction.

Some participants shifted from their traditional or ancestral language to a more dominant language within the region, leading to the decline or even loss of the original language over time. This phenomenon is typically driven by factors such as increased integration into mainstream society, educational policies, employment opportunities, or the desire for social mobility. As a result, the community's linguistic landscape changes, potentially impacting cultural identity and heritage. The shift may also influence intergenerational communication, with younger generations becoming less fluent in their ancestral language, thereby affecting the preservation of cultural traditions and practices associated with it.

Lastly, the language use among participants serves as a marker of cultural identity and belonging. D1–D5 use English for abstract or academic ideas but revert to Yoruba when expressing emotion or cultural sentiment, e.g., "I miss grandma jare!" ("jare" softens or adds familiarity to a statement in Yoruba). C1 and C2 associate Yoruba with familial and domestic contexts. For example, Yoruba is spoken with grandparents, during prayer, or when eating traditional food, thus sustaining cultural continuity. C2's playful use of Yoruba, even in truncated or anglicised form, suggests an emerging bilingual identity that embraces both cultural worlds.

Discussion of Findings

The discussion of findings provides a comprehensive interpretation of the linguistic behaviours exhibited by African children in the diaspora, drawing from digital

ethnography and case studies. Key areas such as linguistic hybridity, code-switching and code mixing, identity formation, and language shift are analysed within the framework of paedolinguistics and sociolinguistics. Paedolinguistics examines the cognitive and social processes by which children acquire language. In diasporic contexts, language acquisition is not merely developmental but also heavily influenced by sociocultural variables such as environment, exposure, and identity pressures. The data from both digital observations and telephone case studies reveal that migrant children often operate in bilingual environments in public domains and heritage languages such as Yoruba at home. This dual exposure shapes a linguistic repertoire that is simultaneously flexible and fragmented. Children like participants C1 and C2 demonstrate the early acquisition of dominant language structures while relegating Yoruba to affective or symbolic usage. As De Houwer (2021) explains, such bilingualism is typical among diaspora children, in which dominant societal pressures encourage additive bilingualism only if deliberate input in both languages is maintained.

Moreover, diaspora children often develop language in fragmented domains, as Fishman (1989) argues through his theory of "domains of language use." For instance, children might employ Yoruba for prayers, greetings, or cultural rituals but switch to English for schooling and digital communication. This functional compartmentalisation reflects the dynamic interplay of language, identity, and social context (Anderson et al., 2022). One of the striking findings in the dataset is the emergence of linguistic hybridity; a blending of phonological, morphological, and semantic features of the native language with those of the dominant host language. Children such as D1–D5 showcase frequent English–Yoruba code-switching, hybrid accents, and syntactic borrowings. For instance, constructions like "mo go school" or the softening of Yoruba phonemes ("ṣ" to "s") demonstrate linguistic blending. This phenomenon aligns with Canagarajah's (2018) concept of translingual practice, where language users fluidly navigate multiple linguistic systems to construct meaning and assert identity.

The development of hybrid linguistic identities, in which children are neither fully aligned with their parents' heritage nor wholly assimilated into the host culture, is evident. The phrase "I miss grandma jare!" exemplifies this hybrid identity. The emotive Yoruba word "jare" is integrated into an English sentence, indicating not linguistic confusion but the child's nuanced expression of emotional attachment through multiple linguistic codes (Cummins, 2021).

The data also highlight age-related patterns of acquisition and retention. Children who migrated before age 5 (C1, C2, and D1–D5) tend to acquire English with greater fluency and phonological accuracy, while their heritage language skills remain limited to basic, often affective expressions. This confirms the Critical Period Hypothesis, which posits that early childhood is the optimal window for acquiring native-like

fluency in a second language (Kirk, 2020). In contrast, older migrants (C3–C5), who had already acquired a foundation in Yoruba before migration, display patterns of attrition. For example, C4 uses Yoruba mainly for cultural expressions such as greetings, but demonstrates tonal loss and syntactic simplification. This is consistent with Paradis (2016), who asserts that second-language dominance can erode L1 grammatical competence when consistent reinforcement is absent. Notably, while younger children adapt quickly to dominant languages, they often do so at the expense of native-language proficiency unless parental or community reinforcement is strong (De Houwer, 2021).

Dominant language proficiency is visibly strong across the dataset, especially among children attending school in the host country. However, this proficiency often correlates with a decline in the use and complexity of the heritage language. For example, C3, who migrated at age 12, now uses Yoruba mostly for metaphorical or nostalgic purposes. In contrast, C1, who migrated as a toddler, uses English almost exclusively in narrative contexts. This pattern underscores Omonijo and Oluwadare's (2021) assertion that language shift is a common trend among African migrants, driven by the institutionalisation of dominant languages in schools and media. Without intentional heritage language instruction, children lose both linguistic and cultural fluency.

The findings offer strong evidence of linguistic hybridity. Children blend accents and vocabulary, producing what Labov (1972) refers to as "sociolinguistic variables", linguistic features that vary by age, class, and peer group. The diphthong simplification in Yoruba, for example, and the fusion of Yoruba lexical items within English sentence frames are prominent. Such hybridity is not a defect but a form of creative linguistic adaptation that enables children to communicate across cultures.

Participants D1–D5 exemplify this hybridity through their use of digital platforms, where English serves as the medium of broader social interaction and Yoruba surfaces for humour or emphasis. This reflects what Aronin and Singleton (2018) term multicompetence, the dynamic ability to negotiate multiple linguistic norms. Several factors contribute to language shift among participants. These include peer influence, school curricula, media exposure, and parental language strategy. Schools in North America and Europe generally operate in English or French, making these the de facto languages of instruction and peer interaction. Consequently, even when children hear Yoruba at home, the absence of structured reinforcement leads to erosion (UNESCO, 2023).

The media also plays a critical role. As observed in digital ethnography, children's consumption of English-language games, cartoons, and YouTube content fosters dominant-language acquisition at the expense of heritage-language retention (European Commission, 2022). Parental influence is a double-edged sword. Some parents enforce Yoruba at home, as seen with C1 and C2, while others adopt English to help children assimilate. Anderson et al. (2022) emphasise that parental language policies significantly shape linguistic outcomes. Where parents consistently use the

heritage language and contextualise it within rituals, food, and family routines, children are more likely to retain fluency.

The findings highlight that language use is a tool for identity construction. Children draw on their linguistic repertoires to express a sense of belonging. For example, C2's use of "Aunty, mo n play video game mi" reflects a deliberate switch that reinforces familial bonds and cultural identity while remaining anchored in the host country's linguistic environment. Language here is performative. It signals group membership, emotional proximity, and even rebellion. C4's view of Yoruba as "cultural" but not "functional" reflects a shift in identity; while the heritage language carries symbolic weight, it lacks utility in everyday life. This aligns with Cummins' (2021) theory of identity texts, which posits that children express their evolving identities through language practices shaped by environment, ideology, and self-perception.

Conclusion

This study set out to explore how migration influences language acquisition and development among African children in the diaspora, with a particular focus on second-generation children aged 4 to 12. Drawing on data from social media observations and telephone-based case studies, the research uncovered significant evidence of bilingual development, linguistic hybridity, and identity negotiation shaped by the complex interplay of environmental, social, and familial factors. Findings indicate that children of African descent in North America and Europe are active participants in multilingual ecologies, yet their linguistic trajectories are not uniform. Age at migration played a critical role: younger children tended to acquire dominant languages such as English more fluently, often at the expense of their heritage language, while older children displayed varying degrees of language retention and attrition. Across all age groups, however, heritage language usage was often limited to home or cultural settings, leading to functional compartmentalisation of language domains.

The study also documented widespread code-switching and code-mixing practices, along with hybrid accent features, which emerged as natural outcomes of prolonged contact between home and host languages. These linguistic behaviours were not indicative of confusion but reflected a high degree of adaptability and communicative competence. Children strategically selected languages based on context and interlocutor, reinforcing Fishman's (1989) theory of domain-specific language use and Labov's (1972) principle of sociolinguistic variation.

Importantly, language use among these children was deeply intertwined with issues of identity. While dominant languages were often used for academic and peer interaction, heritage languages retained emotional and symbolic significance. Children used hybrid speech forms to express dual cultural belonging, suggesting that

language is not only a communicative tool but also a means of negotiating diasporic identities.

Ultimately, the findings affirm that migration has a profound and multifaceted impact on child language development. Without deliberate efforts from families, educational institutions, and host societies, there is a significant risk of heritage language loss, cultural dislocation, and identity fragmentation among African children in the diaspora.

Recommendations

In light of the findings and their implications, several recommendations are proposed to guide parents, educators, policymakers, and researchers in enhancing inclusive and sustainable language practices among African children in diaspora communities. First, it is essential to promote additive bilingualism both at home and in educational settings. Parents should be encouraged to consistently speak their heritage languages with their children, thereby creating a solid linguistic foundation in the first language. At the same time, schools should adopt bilingual education frameworks that not only facilitate the acquisition of the dominant language but also affirm the legitimacy and value of minority languages. Unlike subtractive bilingualism, which replaces the first language with the second, additive bilingualism enables children to expand their linguistic repertoire without displacing their cultural identity. This dual-language competence fosters cognitive flexibility, emotional stability, and a deeper sense of belonging (Cummins, 2021).

Another important recommendation is the development of structured heritage language support programs within diaspora communities. Community leaders, cultural organisations, and faith-based institutions can collaborate to establish weekend language schools, holiday workshops, and online platforms dedicated to teaching African languages such as Yoruba, Igbo, and Amharic. These initiatives serve dual purposes: they provide formal instruction in heritage languages and create social spaces that reinforce cultural practices. For children with limited exposure to native speakers, such initiatives are especially crucial in maintaining linguistic fluency and intergenerational communication.

Educators in multicultural environments must also be trained in culturally responsive pedagogy. Teachers often misinterpret code-switching or mixed language use as indicators of linguistic deficiency, when in fact these behaviours reflect strategic linguistic choices and adaptability. Professional development programs should equip teachers with the knowledge to support children's full linguistic repertoires, acknowledging both their dominant and heritage languages as valid modes of expression. This approach promotes inclusivity in the classroom and recognises the diverse identities that children bring into the learning space.

Migration and Language Development:

In today's digital age, digital media offer powerful tools for revitalising and sustaining minority languages. Educational stakeholders and content creators should harness technology to produce culturally relevant and linguistically rich materials in African languages. This can include animated stories, mobile apps, interactive games, and YouTube channels tailored for young audiences. Given children's high engagement with digital platforms, these resources can supplement traditional instruction, making language learning both accessible and enjoyable. Bridging the gap between cultural tradition and modern technology enhances the likelihood of language retention in younger generations.

Equally important is the need to encourage positive attitudes toward language within families and communities. Children are highly sensitive to the implicit and explicit messages they receive about their heritage languages. When parents or educators devalue native accents or prioritise English or French at the expense of local languages, children may internalise a sense of inferiority linked to their cultural identity. Therefore, it is critical that parents, caregivers, and community figures model pride in using their heritage language. By framing language as a cultural asset rather than a communicative barrier, children are more likely to value and maintain their linguistic heritage.

At the policy level, linguistic diversity must be recognised and incorporated into the frameworks that govern education and integration in host countries. Governments and educational ministries should implement inclusive language policies that reflect the multilingual realities of their populations. Where feasible, mother tongue-based multilingual education should be supported, especially in early childhood and foundational learning stages. UNESCO (2023) advocates for such policies to uphold linguistic rights and promote equitable educational outcomes for minority-language speakers. Policies that protect and promote language diversity are instrumental in countering the forces driving language shift and cultural erosion.

Finally, longitudinal research on diaspora language development is necessary to deepen our understanding of how linguistic competence and identity evolve over time. Most current studies capture language behaviour at a single point in time, missing the long-term effects of migration on language retention and transformation. Longitudinal designs would allow researchers to trace children's trajectories across different developmental stages, providing insight into when and why language attrition occurs and what interventions might be most effective in reversing or mitigating it. Such research is invaluable for shaping future educational models and community programs.

Implementing these recommendations can help counteract the adverse effects of language shift, encourage sustainable multilingualism, and support the linguistic,

cognitive, and cultural development of African children in diaspora. Beyond preserving heritage languages, these efforts are foundational to cultivating a generation of globally competent, culturally grounded, and linguistically versatile individuals capable of navigating the complexities of multicultural societies.

References

Adepoju, A. (2018). Migration in West Africa: Trends, challenges, and prospects. African Migration & Development Policy Series.

Adepoju, A. (2021). *Migration in sub-Saharan Africa: Trends, issues, and policies*. Routledge.

Ajala, A. T. & Adeniji, F. A. (2025). A Sociolinguistic Analysis of Code Switching and Code Mixing in Funke Akindele's Battle on Buka Street. *Journal of English Scholars' Ass. of Nigeria*, 27(1), 18 – 32. www.journalofenglishscholarsassociation

Ajala, A. T., Adeyanju R. & Adebagbo, A. (2025). Tradition and Culture: A Reflection of African Society in Femi Adebayo's Film, Seven Doors. *International Journal of Literature, Language and Linguistics*, 8 (2): pp. 1-20. DOI: https://doi.org/10.52589/IJLLL-IYE4GKIN

Akpuokwe, C. U, Eneh, N, E, Adeniyi, A. O., & Bakare, S. S. (2024). Migration Trends and Policies: A Review of African and USA Perspectives. *International Journal of Applied Research in Social Sciences,* 6(3), DOI: 10.51594/ijarss.v6i3.851

Aronin, L., & Singleton, D. (2018). Twelve lectures on multilingualism. Multilingual Matters.

Botangen, K. A., Vodanovich, S., & Yu, J. (2018). Preservation of Indigenous culture among Indigenous migrants through social media: The Igorot peoples. arXiv. https://arxiv.org/abs/1802.09685

Canagarajah, S. (2018). *Translingual practice: Global Englishes and cosmopolitan relations*. Routledge.

Cummins, J. (2021). Identity texts and the dialogic construction of knowledge. *Journal of Multilingual and Multicultural Development, 42*(7), 589–602. https://doi.org/10.1080/01434632.2020.1746314

Dash, N. S. (2024). Documentation and digitization of endangered indigenous languages: Methods and strategies. *Proceedings of the International Mother Language Day*, 5-24.

De Houwer, A. (2021). *Language Input and Acquisition in Bilingual Development*. Cambridge University Press.

De Houwer, A. (2012). Early Bilingualism. *The encyclopedia of Applied Linguistics*, *1*.

European Commission. (2022). *Language learning of migrant children in Europe*. Retrieved from https://ec.europa.eu/education (Accessed on 17th June, 2025).

Fishman, J. A. (1989). *Language and ethnicity in minority sociolinguistic perspective*. Multilingual Matters.

International Organization for Migration (IOM). (2024). *World Migration Report 2024*. Retrieved from   https://worldmigrationreport.iom.int (Accessed on 10th May, 2025).

Migration and Language Development:

Cheung Judge, R. (2025). 'I realise that they are doing it for my own good':'homeland'education mobilities and intergenerational negotiation in Nigerian diaspora families. *Journal of Ethnic and Migration Studies*, *51*(6), 1470-1488.

Kirk, J. (2020). *Language development in children*. Oxford University Press.

Kupolati, O. (2024). Heritage language maintenance practices of Yorùbá–English bilingual immigrants in the United States. *International Multilingual Research Journal*, 18(2), 155–173.

Labov, W. (1972). *Sociolinguistic patterns*. University of Pennsylvania Press.

Luo, Z. (2023). The effectiveness of gamified tools for foreign language learning: A systematic review. Frontiers in Psychology, 14, 1154236. https://doi.org/10.3389/fpsyg.2023.1154236

Masoyinbo. (2024). Masoyinbo language challenge [YouTube channel]. https://www.youtube.com/@Masoyinbo

Migration Policy Institute. (2024). *Trends in African Migration.* Retrieved from https://www.migrationpolicy.org (Accessed on 12th May, 2025).

Mütterlein, J. & Fuchs, C. (2019). Digital Technologies and their Influence on Spaces. Retrieved from https://www.researchgate.net/publication/337818199_Digital_Technologies_and_their_Influence_on_Spaces. [Accessed on the 12th June, 2025].

Nikolopoulou, K. (2024). Children in the Digital Space: Issues Researched and Suggestions for Future Research. *Creative Education.* 15. 815-827. 10.4236/ce.2024.155049.

Obojska, M. & Vaiouli, P. (2023). Digital media as language and literacy learning spaces in multilingual families – survey results from Luxembourg. *International Journal of Multilingualism.* 22. 1-19. 10.1080/14790718.2023.2293706.

Omonijo, O., & Oluwadare, O. (2021). Language attrition among African migrant children: Social and cultural factors. *International Journal of Multilingualism,* 18(3), 245-261.

Organisation for Economic Co-operation and Development (OECD) & IOM. (2023). *African Migration: Drivers and Policy Responses*. Retrieved from https://www.oecd.org/publications. (Accessed on 12th May, 2025).

Paradis, J. (2016). Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism, 6*(3), 377–401.

Ryan, K. (2016). Community-based materials development: Using digital storytelling for teaching and learning Indigenous languages (Master's thesis). University of British Columbia. https://open.library.ubc.ca/soa/cIRcle/collections/ubctheses/24/items/1.0300144

Salazar, J. F., White, R., & Chen, Y. (2021). Bridging diaspora: Technology in the service of language revitalization. Language Documentation & Conservation, 15, 345–367.

UNESCO. (2022). International Decade of Indigenous Languages (2022–2032): Global action plan. UNESCO.

UNESCO. (2023). Inclusive and Multilingual Education: A Language Rights Approach. Retrieved from https://unesdoc.unesco.org (Accessed on 17th, June, 2025).

United Nations High Commissioner for Refugees (UNHCR). (2023). *Global Trends: Forced Displacement in 2023*. Retrieved from https://www.unhcr.org. (Accessed on 14th May, 2025).

Wang & Hatoss (2024): This is a real scoping review published in Current Issues in Language   Planning,   DOI   available: https://doi.org/10.1080/14664208.2024.2388991

Wang, L., & Hamid, M. O. (2022). The role of polymedia in heritage language maintenance: A family language policy perspective. Journal of Multilingual and Multicultural   Development.   Advance   online   publication. https://doi.org/10.1080/01434632.2022.2142233

World Bank. (2023). Groundswell Africa: Climate-Induced Migration in Sub-Saharan Africa. Retrieved from https://www.worldbank.org. (Accessed on 14th May, 2025).