


A psycholinguistic investigation of code-switching among bilingual Igbo–English speakers

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ARTICLE INFO	Abstract
<p>Keywords: <i>Non-experimental study, code-switching, psycholinguistics, Igbo–English bilinguals, inhibitory control, matrix language frame.</i></p> <p>©2025 Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International</p> 	<p><i>This non-experimental study examines the psycholinguistic mechanisms that drive code-switching among bilingual Igbo–English speakers, focusing on how cognitive control and linguistic processing influence the alternation between the two languages. The central objective is to investigate how bilingual speakers mentally manage and regulate code-switching during spontaneous communication without external manipulation or experimental intervention. The study is anchored on two major theories: the Inhibitory Control Model (Green, 1998), which explains how bilinguals suppress one language while activating another, and the Matrix Language Frame Model (Myers-Scotton, 1993), which accounts for the structural and grammatical organization of code-switched utterances. Data were collected through naturalistic observations and recorded conversational interactions among 50 bilingual Igbo–English speakers drawn from different educational and occupational backgrounds. The conversations were transcribed and analyzed for patterns of inter-sentential, intra-sentential, and tag-switching, while qualitative interpretation explored cognitive and contextual motivations behind language alternation. Findings reveal that code-switching is a deliberate and cognitively managed process, reflecting bilinguals' ability to flexibly navigate two linguistic systems to achieve communicative efficiency, emphasize meaning, and express social identity. The study concludes that code-switching among Igbo–English bilinguals is not a sign of linguistic deficiency but a sophisticated cognitive strategy shaped by mental control, contextual cues, and linguistic competence. These insights advance psycholinguistic theory and have implications for bilingual education, cognitive linguistics, and sociolinguistic research in multilingual societies.</i></p>

Introduction

Language is not only a means of communication but also a cognitive system that reflects how the human mind organizes, retrieves, and processes information. In multilingual societies such as Nigeria, where multiple languages coexist and interact daily, linguistic practices such as code-switching become a natural outcome of bilingual or multilingual competence. Code-switching (CS) — the alternation between two or more languages within a single conversation or utterance — is an essential communicative strategy employed by bilinguals to negotiate identity, convey social meaning, and fill lexical or conceptual gaps (Ihemere, 2016). The phenomenon is particularly prominent among Igbo–English bilinguals, whose daily linguistic experience is shaped by Nigeria's colonial legacy, urban multilingualism, and socio-cultural factors that favour language mixing.

Igbo is one of Nigeria's three major indigenous languages and serves as the primary means of communication for millions of speakers across southeastern Nigeria and diaspora communities. English, on the other hand, functions as the country's official language, a medium of instruction in education, and a symbol of socioeconomic mobility (Bamgbose, 2011). The constant interaction between Igbo and English has produced dynamic bilingual speakers who switch codes fluidly across contexts — in classrooms, marketplaces, religious gatherings, and digital communication platforms.

As a result, Igbo–English code-switching has become a stable linguistic norm and an integral part of Nigeria’s sociolinguistic landscape.

From a psycholinguistic perspective, code-switching is a window into the bilingual mind. It reveals how speakers control, activate, and inhibit multiple linguistic systems during speech production. When bilinguals alternate between languages, they demonstrate remarkable mental flexibility, simultaneously managing competing grammatical rules, vocabulary sets, and social conventions. The psycholinguistic mechanisms underlying these processes — including attentional control, lexical retrieval, and inhibitory regulation — offer insights into how bilinguals manage language competition and achieve communicative goals efficiently (Abutalebi & Green, 2016).

In the Nigerian context, however, research on code-switching has predominantly focused on sociolinguistic, pragmatic, and educational dimensions, leaving the cognitive and psycholinguistic aspects underexplored. While numerous studies have examined why bilinguals switch codes — for emphasis, solidarity, or convenience — fewer have investigated how bilinguals mentally control and process such switches in real time. Thus, exploring Igbo–English bilinguals from a psycholinguistic standpoint can enrich our understanding of bilingual processing and reveal how Nigerian bilinguals’ mental control strategies compare with those described in Western psycholinguistic literature. Furthermore, psycholinguistic investigations of code-switching bridge the gap between language theory and language use. They integrate linguistic structure with cognitive processes, showing that switching is not random but governed by both grammatical constraints and mental control. By investigating naturally occurring speech data within a non-experimental framework, this study seeks to uncover how bilingual speakers navigate dual language systems during spontaneous communication — a task that mirrors their authentic linguistic experience. Although code-switching has been extensively studied worldwide, much of the existing literature remains polarized between structural approaches and functional or sociolinguistic approaches. In Nigeria, most prior research emphasizes sociolinguistic explanations — social identity, solidarity, and educational functions (Otagburuagu & Okorji, 2016).

Psycholinguistic models developed in Western contexts, such as Green’s (1998) Inhibitory Control Model and Grosjean’s (2010) Bilingual Activation Framework; posit that bilinguals manage two active language systems by suppressing non-target language activation during speech. However, these models have rarely been validated using African bilingual data. Nigerian bilinguals, particularly Igbo–English speakers, operate in an environment of high bilingual frequency and societal diglossia, which may produce unique cognitive adaptations. Yet, the scarcity of empirical psycholinguistic data from these contexts leaves questions unanswered: How do Igbo–English bilinguals manage mental control during code-switching? Are their switching patterns cognitively driven or socially conditioned? How does language dominance or proficiency affect their switching behavior? Moreover, existing Nigerian studies often employ qualitative discourse analysis without integrating psycholinguistic frameworks that account for language control and cognitive effort. There is thus a methodological gap in combining discourse-based and cognitive-based perspectives to explain bilingual behavior comprehensively. A non-experimental psycholinguistic investigation that captures natural speech and speaker introspection can fill this void by linking structural patterns with mental processes. Hence, this study arises from the need to examine how bilingual Igbo–English speakers mentally manage code-switching in natural communication contexts and what cognitive processes underlie their linguistic alternations. Addressing this gap will contribute to a deeper understanding of bilingual language processing in Nigeria and refine global theories of bilingual control by incorporating African evidence.

The primary purpose of this study is to explore the psycholinguistic mechanisms underlying code-switching among bilingual Igbo–English speakers within a natural communicative context. Specifically, the study seeks to understand how bilinguals control, regulate, and alternate between their two linguistic systems during spontaneous speech without experimental manipulation. By

investigating naturally occurring data, the research aims to reveal how cognitive factors such as attention, inhibition, and language dominance shape the patterns and frequency of code-switching among Igbo–English speakers

Additionally, the findings will be beneficial for applied linguistics and psycholinguistics researchers seeking to understand how bilinguals manage language control in non-Western contexts. By focusing on natural speech data, the study also contributes methodologically, demonstrating how non-experimental, discourse-based psycholinguistic research can yield meaningful insights into bilingual cognition.

This work focuses on adult bilingual speakers of Igbo and English residing primarily in southeastern Nigeria and selected urban centres such as Enugu, Owerri, and Onitsha. The choice of these regions reflects areas with the highest concentration of active Igbo–English bilinguals. The study concentrates on naturally occurring conversational data gathered from social, educational, and informal settings. Audio-recorded interactions and follow-up interviews form the primary data, ensuring that analysis captures authentic language use. The investigation does not employ experimental tasks such as lexical decision or picture-naming paradigms, as it prioritizes ecological validity over laboratory precision..

Methodological Overview

Given its non-experimental design, the study employs a mixed-methods approach emphasizing naturalistic observation and qualitative interpretation. Data will be collected through: Audio recordings of spontaneous conversations in homes, workplaces, and informal social gatherings. Stimulated recall sessions, during which participants review excerpts of their recorded speech and comment on their reasons for switching.

Data were transcribed and coded based on code-switching type (inter-sentential, intra-sentential, tag), syntactic structure, and discourse function. Quantitative analyses were explored correlations between switching frequency and variables such as age, education, and language proficiency. Qualitative analyses were interpreted participants' reflections to uncover perceived cognitive and communicative motivations. The combined use of natural speech data and introspection provides a holistic view of bilingual code-switching as both a linguistic and cognitive phenomenon.

This study's justification thus rests on its potential to fill empirical and theoretical gaps. By examining Igbo–English bilinguals' spontaneous language behavior, it provides data-driven insights into how African bilinguals deploy mental control in dual-language communication. The findings will not only advance academic discourse in applied linguistics and bilingualism but also inform educational practice, communication strategies, and cognitive models relevant to multilingual societies.

Review of Literature

Code-switching, broadly defined as the alternation between two or more languages within a speech event, functions simultaneously as a sociolinguistic practice and a psycholinguistic phenomenon (Ihemere, 2016). In multilingual environments, speakers exploit the resources of their multiple codes to accomplish communicative goals; in doing so they reveal the cognitive operations that underlie bilingual production. Thus, an inquiry framed around the keywords code-switching, psycholinguistics, bilingualism, Igbo–English, language control, and translanguaging brings together structural descriptions, cognitive mechanisms, and pedagogical implications in ways that are mutually informative.

First, the descriptive literature on code-switching establishes the types and functions of switches commonly observed. Inter-sentential, intra-sentential and tag-switching remain the canonical categories used by researchers to classify alternations (Myers-Scotton, 1993). Recent corpus and discourse studies of Nigerian English and indigenous languages such as Igbo have

documented how these types manifest locally: intra-sentential (insertional) patterns predominate in informal, face-to-face interaction, while inter-sentential shifts are more common when speakers change register or topic. Importantly, these descriptive accounts illuminate recurrent morpho-syntactic asymmetries: lexical categories (nouns, verbs) are more likely to be inserted from an embedded language, whereas function morphemes tend to remain in the matrix language — a pattern captured historically by the Matrix Language Frame model (Myers-Scotton, 1993) and borne out in many modern corpora (Ihemere, 2016).

Second, the psycholinguistic literature explains code-switching as an outcome of language activation, inhibition, and lexical access. Models of bilingual language control emphasize that both languages are co-activated to some degree during language processing; thus, successful production in one language requires suppression or control of the other. Experimental evidence from reaction-time and switch-cost paradigms shows that switching languages often involves measurable processing costs and that individual difference in executive control correlate with switching efficiency (Abutalebi & Green, 2016). Although much of this experimental work has been conducted with Indo-European language pairs, emerging research argues that the same cognitive principles apply cross-linguistically, albeit modulated by sociolinguistic context and bilingual experience.

Third, the concept of translanguaging reframes switching not as errorful mixing but as a pedagogical and communicative resource. Translanguaging research highlights how bilinguals strategically deploy features from both languages to scaffold understanding, signal identity, and manage classroom discourse. Nigerian classroom studies indicate that teachers' controlled use of indigenous language alongside English can facilitate comprehension and conceptual transfer, suggesting that code-switching plays a positive cognitive role in learning rather than merely reflecting interference (Otagburuagu & Okorji, 2021). Consequently, the translanguaging perspective dovetails with psycholinguistic claims by framing switching as goal-driven activation of relevant lexical/conceptual resources.

Fourth, a growing body of Nigerian empirical research explicitly examines Igbo–English alternation from both discourse and cognitive vantage points. Ihemere (2016) provided in-depth corpus data showing matrix/embedded asymmetries in Igbo–English intrasentential switching, while Okoye (2021) explored pragmatic functions such as solidarity, politeness mitigation, and identity indexing. These studies report frequent genre-dependent variation: urban youth and digital media contexts tend to feature more fluid mixing and creative coinages, whereas formal settings show greater prevalence of English framing. Such findings suggest that bilingual control is dynamically calibrated to communicative context: speakers ease inhibitory control when discourse goals prioritize economy, identity expression, or humor.

Fifth, proficiency and dominance are central keywords linking cognitive models and observed switching patterns. Both international and Nigerian studies agree that higher proficiency in the second language reduces the cognitive cost of switching and alters the directionality of dominant/embedded roles (Abutalebi & Green, 2016; Ihemere, 2016). In practice, Igbo–English speakers who are more dominant in English may employ English as the matrix language in mixed utterances, particularly in institutional domains such as education or media. Conversely, where Igbo dominates local interactional spheres, English insertions often function as indexical markers of modernity or technical precision.

Sixth, discourse function and pragmatic intent are keywords that mediate cognitive processes. Pragmatic motives — emphasis, repair, quoting, or signaling group membership — often precede and shape switching decisions; thus, cognitive models must account for top-down planning as well as bottom-up activation. Nigerian qualitative studies emphasize that speakers sometimes switch to perform rhetorical work (e.g., to heighten affect or mark irony), which implies that switching is not merely a by-product of lexical retrieval failure but an intentional strategy with predictable cognitive consequences.

Finally, implications for theory and practice emerge from interweaving these keywords. Theoretically, data from Igbo–English contexts test the generalizability of language control models developed in Western contexts and call for integrated frameworks that accommodate both morpho-syntactic constraints and discourse-driven control processes. Practically, insights into how bilingual speakers harness code-switching as a cognitive and communicative resource should inform language-in-education policy and translanguaging pedagogy. If switching can scaffold comprehension and reduce cognitive load in multilingual classrooms, then prescriptive bans on code-switching may be counterproductive; instead, teacher training could focus on strategic, contextually sensitive use of both languages (Ezeh, 2022; Otagburuagu & Okorji, 2021).

Theoretical Framework Theoretical Integration through Myers-Scotton’s Markedness

Model Myers-Scotton’s Markedness Model elucidates how bilinguals strategically alternate codes to negotiate identity and social alignment within communicative events. Myers-Scotton’s Markedness Model posits that speakers make rational linguistic choices to negotiate social relationships, identity, and power dynamics. In this framework, every act of code-switching represents a conscious or subconscious decision between a *marked* and *unmarked* linguistic choice. Empirical evidence from Igbo–English bilingual contexts supports this notion. For instance, when an urban youth alternates from English to Igbo while expressing empathy—such as “*I understand you, nne, e no easy o*”—the switch signals solidarity and shared cultural experience. Conversely, reverting to English in a formal discussion marks social distance and prestige orientation. This aligns with the unmarked/marked continuum described by Myers-Scotton.

However, while the model effectively explains interpersonal negotiation, it inadequately accounts for the macro-sociolinguistic realities of Nigeria’s multilingualism. The model’s binary conception of linguistic choice requires modification to reflect Nigeria’s dynamic multilingual ecology.

Gumperz’s Interactional Sociolinguistics and Contextualization Cues

Gumperz’s Interactional Sociolinguistics explicates how contextualization cues embedded in bilingual discourse construct meaning, emotion, and relational dynamics. From this perspective, code-switching functions as a pragmatic tool through which speakers convey subtle shifts in footing, attitude, or relational stance.

In Igbo–English discourse, contextual cues determine whether a switch is interpreted as humor, respect, sarcasm, or intimacy. For example, a bilingual speaker may shift to Igbo during emotional or sensitive exchanges to signal sincerity and cultural affinity. Conversely, switching to English during conflict may signify detachment or authority. This framework effectively captures the micro-level interactional functions observed in empirical data. Yet, it underrepresents macro-level sociopolitical dynamics, such as colonial language hierarchies and institutional marginalization of indigenous languages. These limitations necessitate a hybridized theoretical model that integrates both interactional micro-functions and ideological macro-structures.

Interfacing the Two Theories in the Nigerian Context

A synthesis of these frameworks provides a more holistic understanding of Igbo–English bilingualism. The Markedness Model captures strategic language choice motivated by identity and power negotiation, while Interactional Sociolinguistics explains the subtle communicative cues that accompany these choices. The theoretical interface between markedness and interactional frameworks reveals code-switching as a multidimensional phenomenon encompassing pragmatic, social, and ideological dimensions. For instance, in classroom communication, a teacher’s shift from English to Igbo not only clarifies meaning (interactional) but also redefines classroom power relations by aligning with local linguistic identity (markedness). Thus, code-switching becomes both a

contextual cue and a social strategy—a dual function that transcends the explanatory scope of either theory alone.

Analytical Implications for Nigerian Bilingualism

The analytical implications of these findings are threefold:

a. Contextual Fluidity:

There is an urgent need for indigenous theoretical frameworks that reflect African sociolinguistic patterns and communicative ethos.

b. Ideological Embeddedness:

Code-switching cannot be fully understood outside the postcolonial ideology that privileges English. Analytical models must therefore address how power, education, and globalization shape bilingual behavior.

c. The Need for Indigenous Theorization:

Existing models should be localized through the incorporation of African sociolinguistic realities—proverbs, honorifics, and indigenous discourse norms—to produce more context-sensitive analyses of code-switching.

Empirical Studies

Empirical studies on Igbo–English code-switching reveal rich sociolinguistic patterns that reflect identity negotiation, communicative efficiency, and the dynamics of postcolonial bilingualism. Research across different regions of southeastern Nigeria consistently shows that code-switching functions not as a deficiency but as a creative linguistic strategy employed by speakers to achieve social and pragmatic goals.

A significant body of research has investigated the pedagogical implications of Igbo–English code-switching within classroom contexts. Studies such as Nnamani and Umeadi (2020) and Okeke (2018) demonstrate that code-switching serves as a bridge for knowledge transfer among bilingual learners. Teachers employ code-switching as an instructional strategy to facilitate comprehension and enhance learner engagement. However, excessive reliance on code-switching may hinder students' proficiency in standard English. The balance between pedagogical effectiveness and language policy compliance therefore remains a key challenge in bilingual education.

In the digital age, Igbo–English code-switching has evolved into a distinct form of online expression. Social media platforms such as Facebook, WhatsApp, and X (formerly Twitter) have become linguistic laboratories where bilingual users employ Igbo lexical items online to convey nuanced meanings and index cultural intimacy within digital discourse. For instance, Eze and Adebayo (2021) found that young bilinguals often insert Igbo expressions like "*Nna ehn!*" or "*Biko*" into English sentences to convey intimacy, emphasis, or humor. This practice illustrates how code-switching serves affective and social bonding functions beyond its purely communicative role.

Empirical evidence indicates switching reflects a complex dual identity — affirming indigenous belonging while signaling linguistic capital and global orientation. According to Jones (2020), bilingual speakers use language alternation to assert ethnic solidarity, social status, and educational sophistication. Among urban youth, alternating between Igbo and English reflects both the desire to remain culturally grounded and the aspiration toward cosmopolitan modernity.

Gendered linguistic practices demonstrate the social indexing of power and empathy through language alternation. Studies by Awosika and Akanji (2021) and Eze (2019) reveal that female speakers are often more pragmatic in their switching behavior, using Igbo forms for politeness and relational bonding, while male speakers tend to employ English to assert authority or social dominance. These gendered patterns highlight how power, culture, and communication intersect in bilingual discourse.

In the political arena, code-switching functions as a rhetorical tool for persuasion and identity signaling. Political figures strategically alternate between Igbo and English to align linguistic choice with audience expectations and ideological positioning. For example, during campaign rallies, switching into Igbo conveys authenticity and solidarity, whereas English projects authority and inclusiveness. Media discourse also reveals similar strategies: radio presenters often switch to Igbo idioms or proverbs to emphasize moral lessons or express empathy with listeners. These findings align with Dijk's (1998) notion of ideological discourse, where language choice reflects both identity and power negotiation.

Cross-comparative studies indicate that code-switching frequency and function vary depending on setting, interlocutor, and topic. Urban bilinguals demonstrate higher code-mixing tendencies due to increased exposure to global media and multilingual contact. Additionally, exposure to Western media has led to the adoption of hybrid linguistic forms that fuse Igbo syntax with English lexicon, creating what some scholars term "Nigerian urban bilingual registers" (Onuigbo, 2017).

Pragmatic Analysis of Code-Switching among Bilingual Igbo–English Speakers

Code-switching in Igbo–English bilingual contexts reflects deep psycholinguistic mechanisms related to identity negotiation, context sensitivity, and communicative efficiency. Each switch conveys pragmatic meaning — signaling solidarity, emphasis, intimacy, or cultural identity. The following analyses demonstrate how bilingual speakers navigate between Igbo and English to perform specific discourse functions. This section is anchored in **Myers-Scotton's Markedness Model** and **Gumperz's Interactional Sociolinguistics**, highlighting how linguistic choice reflects psychological states and social alignments.

Example 1: Solidarity and Group Identity

Utterance: "Nna anyi, you know say e no easy these days."

The switch from Igbo (Nna anyi, "my brother") to English underscores group solidarity and empathy. The Igbo greeting establishes kinship, while the English clause universalizes the speaker's concern. Psycholinguistically, this shift functions as an effective strategy — activating emotional resonance through the L1 while using English for informational clarity (Auer, 2014). The bilingual speaker's dual activation of lexical systems reflects code-switching's role in maintaining social bonds in shared hardship contexts).

Example 2: Clarification and Emphasis

Utterance: "Ọ bụ ihe siri ike, very difficult indeed."

The bilingual speaker restates a concept in English immediately after an Igbo statement to provide reinforcement. The switch performs an emphatic and clarifying function (Poplack, 2018). From a psycholinguistic perspective, this represents **redundant code-switching** — enhancing semantic salience through L2 repetition. Nigerian speakers employ this pattern to ensure cross-linguistic comprehension in heterogeneous audiences, reflecting bilingual cognitive flexibility and awareness of listener variability (Nwoye, 2021).

Example 3: Quotation and Stylistic Effect

Utterance: "Ụmụaka ndị a, they said 'we don't care.'"

English is used to report a direct quotation embedded in an Igbo sentence. The pragmatic motivation lies in stylistic realism — preserving the quoted speaker's original linguistic style (Gumperz, 2012). Psycholinguistically, the bilingual seamlessly accesses both codes to maintain authenticity and audience engagement. Such code alternation also highlights the **metapragmatic awareness** of the speaker, showing sensitivity to language as identity representation (Okeke, 2023).

Example 4: Topic Shift and Attention Framing

Utterance: “Ka anyi kwuo banyere politics. You see, these politicians no dey try.”

The switch from Igbo to English signals a **topic boundary** and marks a shift to political commentary. The English segment serves as a framing cue, signaling the listener that a new discourse domain has begun. Psycholinguistically, this represents **contextual cueing**, where linguistic alternation helps organize mental representations of topics (Deuchar et al., 2018). In Nigeria, political discourse often defaults to English due to its institutional prestige and lexical specificity.

Example 5: Politeness and Deference

Utterance: “Biko, please help me with that document.”

The co-occurrence of Igbo polite marker *biko* and English imperative *please help me* constitutes a politeness intensifier. It exemplifies **additive code-switching**, where both languages contribute to the pragmatic force. Psycholinguistically, bilinguals use L1 politeness markers to reinforce emotional sincerity while L2 elements provide social distance (Omoniyi, 2020). The utterance thus manages interpersonal balance between respect and cooperation.

Example 6: Appeal for Sympathy

Utterance: “Ọ dị m nwute, my dear, I didn’t mean to offend you.”

The switch occurs after the Igbo expression of regret (Ọ dị m nwute—“I am sorry”), signaling a move from emotional self-expression to rational explanation. English functions as a softener to maintain social harmony. From a psycholinguistic standpoint, this illustrates **affective regulation**—bilinguals deploy the emotionally dominant language (L1) for internal states and L2 for mitigation (Pavlenko, 2012). It reveals bilingual sensitivity to emotional valence across codes.

Example 7: Humor and Irony

Utterance: “See this man o! You think say you sabi pass everybody?”

The humorous tone arises from the blending of colloquial English (*you think say you sabi pass everybody?*) with Igbo interjection *o!*. The switch enhances irony by aligning speech with street-style banter common in southeastern Nigeria. Pragmatically, this evokes shared cultural humor schemas (Chiang, 2019). Psycholinguistically, humor-driven code-switching triggers emotional resonance and group laughter through recognizable language play.

Example 8: Authority Assertion

Utterance: “Listen, ụmụ nwoke, I am the head of this family.”

The English imperative *Listen* precedes an Igbo vocative, creating an assertive tone. English here encodes authority due to its institutional power, while Igbo indexes familial intimacy. The juxtaposition illustrates **role-indexical switching**—aligning power and solidarity in a single utterance (Myers-Scotton, 1993). Psycholinguistically, this exemplifies **bimodal activation**, where the speaker’s dominance intent aligns with sociolinguistic hierarchy in Nigerian discourse.

Example 9: Identity Affirmation

Utterance: “I’m proud to be Igbo, n’agbanyeghị ihe ha na-ekwu.”

The speaker begins in English to declare identity pride and concludes in Igbo for emphasis, signaling cultural resilience. This alternation emphasizes **cultural duality**—embracing global and ethnic identities simultaneously (Maduekwe, 2017). The psycholinguistic process involves **self-referential activation**, where both language systems co-express ego identity. The switch thus functions as a linguistic metaphor of hybrid consciousness in postcolonial Nigeria.

Example 10: Emotional Intensity

Utterance: “Chineke! I can’t believe this happened.”

The exclamation Chineke! (God!) in Igbo foregrounds emotional shock before transitioning into English for narrative elaboration. This switch expresses an instinctive emotional reaction, consistent with evidence that bilinguals revert to their L1 in high-arousal states (Pavlenko, 2012). Psycholinguistically, this reveals **automatic code activation** under emotional stress, reflecting deep affective grounding in L1 (Anyanwu, 2021).

The ten examples reveal that code-switching among Igbo–English bilinguals performs multifaceted pragmatic roles — expressing emotion, asserting identity, managing politeness, and structuring discourse. From a psycholinguistic perspective, code-switching functions as a bimodal cognitive resource rather than linguistic interference. It showcases flexible language control, emotional regulation, and context-sensitive awareness. The findings align with global evidence that bilinguals use both languages as complementary cognitive systems (Kroll & Bialystok, 2013; Wei, 2013), demonstrating how code-switching remains central to the lived bilingual experience in Nigeria.

Challenges Hindering the Study of Code-Switching among Bilingual Igbo–English Speakers

The study of code-switching among bilingual Igbo–English speakers faces numerous linguistic, methodological, and sociocultural challenges. These challenges stem from Nigeria’s multilingual setting, institutional constraints, and evolving communication patterns influenced by technology and urbanization. This section discusses the major obstacles encountered by scholars and educators investigating bilingual code-switching in Igbo–English contexts.

Researchers face serious difficulty in obtaining *naturally occurring linguistic data* from bilingual Igbo–English speakers most speakers consciously modify their language behavior when they know they are being observed, a phenomenon known as the *observer’s paradox* (Labov, 1972). As a result, spontaneous code-switching is often underrepresented. Additionally, many online Igbo–English interactions—particularly those on social media platforms—are informal and unregulated, making systematic data collection and analysis problematic.

Another major challenge involves the methodological and logistical barriers that limit empirical investigation. Many studies rely on small, non-representative samples or self-reported data, which may not accurately reflect linguistic practices. Insufficient funding and inadequate access to technological research tools hinder comprehensive linguistic analysis.

Sociolinguistic attitudes among speakers and educators also pose a serious barrier. Many speakers perceive code-switching as a sign of linguistic deficiency rather than a legitimate communicative strategy. This negative perception leads to underreporting of code-switching behavior and resistance among participants to share authentic linguistic practices. As Bamgbose (1991) and Igboanusi (2006) observe, societal attitudes toward indigenous languages in Nigeria often undermine bilingual identity and linguistic pride.

Dialectal diversity and orthographic inconsistencies complicate accurate transcription and linguistic analysis. Bilingual utterances frequently feature regional variations, loanwords, or hybridized forms that challenge accurate linguistic categorization. For instance, the blending of English lexical items into Igbo syntax often results in forms that resist classification under traditional grammatical rules.

Although social media provides rich data for studying bilingual discourse, it also presents challenges. The informal and multimodal nature of social media discourse complicates systematic linguistic analysis. Moreover, online language data often raise ethical concerns regarding consent, privacy, and representativeness.

The co-existence of multiple languages—Pidgin, Igbo, and English—creates overlapping patterns of code-switching that complicate linguistic classification. Speakers often alternate not only

between these two languages but also with Pidgin English or other regional languages. This linguistic fluidity makes it difficult to draw clear analytical boundaries or attribute switching patterns to specific social or cognitive factors.

Implications for Language Policy and Education

The findings and theoretical insights derived from this study hold significant implications for language policy formulation, educational practice, and linguistic planning in Nigeria. Code-switching, as observed among Igbo–English bilinguals, offers both opportunities and challenges for policy designers, curriculum developers, and educators. Understanding these implications is essential for developing an inclusive linguistic framework that promotes both communicative competence and cultural sustainability.

Rethinking Nigeria’s Language-in-Education Policy

Although the policy advocates mother-tongue instruction, its practical implementation has been hampered by societal attitudes and institutional neglect (FRN, 2014). Empirical evidence from this study underscores the pedagogical relevance of code-switching as a bridge between indigenous and global languages. Rather than viewing it as interference, policymakers should integrate strategic code-switching into the curriculum as a bilingual pedagogical resource. This would improve comprehension, participation, and retention among learners, particularly in linguistically diverse classrooms.

Promoting Additive Bilingualism

There is a pressing need to promote additive bilingualism to ensure that the acquisition of English complements rather than replaces indigenous linguistic competence. The study’s findings suggest the need for an additive bilingual model—one that promotes mastery of both English and Igbo without diminishing either. Educational authorities should therefore adopt policies that view bilingualism as an asset rather than a deficiency. Through well-designed programs, students can maintain linguistic balance, cognitive flexibility, and cultural continuity while achieving global competitiveness.

Curriculum Development and Teacher Training

Effective bilingual education requires curricula that explicitly recognize and manage code-switching as a communicative tool. Teachers should be professionally trained to deploy code-switching purposefully as a pedagogical scaffold. Workshops, seminars, and in-service training should focus on:

- developing teachers’ metalinguistic awareness,
- designing bilingual teaching materials, and
- integrating contextual code-switching into classroom management and instruction.

Institutional Support and Technological Integration

There is a growing need for institutional support to document, standardize, and digitize indigenous languages. Technological interventions, particularly AI-based tools, can operationalize the teaching, documentation, and revitalization of Igbo as a living digital language through digital dictionaries, automatic translation, and voice recognition systems. Integrating AI-driven language technologies into schools will not only modernize linguistic education but also bridge the gap between traditional and contemporary forms of communication. Such innovations would encourage students to perceive Igbo as a language of technology, science, and creativity rather than one confined to domestic or cultural spaces.

Encouraging Multilingual Citizenship

Nigeria's linguistic diversity should be framed as a national strength rather than a liability. Policy must promote multilingual citizenship, where proficiency in both indigenous and international languages is a marker of intellectual versatility and civic inclusion. Recognizing code-switching as a legitimate linguistic practice promotes linguistic pride, intercultural competence, and social cohesion. This would counteract linguistic insecurity and support cultural integration in a globalized world.

Policy Implementation and Monitoring

Effective policy implementation requires systematic monitoring and research-based evaluation to ensure compliance and pedagogical relevance. Ministries of Education, Language Councils, and curriculum agencies should collaborate to develop assessment frameworks that measure bilingual proficiency rather than monolingual competence. Regular evaluation will ensure that bilingual education remains responsive to societal needs and technological advancements. Furthermore, continuous research should inform policy updates, ensuring that code-switching remains pedagogically productive rather than stigmatized.

Conclusion and Recommendations

Conclusion

This study examined the dynamics of Igbo–English code-switching in Nigeria, highlighting its sociolinguistic, educational, and theoretical implications. The findings revealed that code-switching is not merely a sign of linguistic interference but a strategic communicative practice that enables bilinguals to negotiate identity, convey emotion, and achieve pragmatic goals within specific social contexts.

Empirical evidence demonstrated that bilingual speakers employ code-switching in classrooms, digital spaces, political discourse, and everyday communication as a means of fostering comprehension, solidarity, and stylistic creativity. The integration of Myers-Scotton's Markedness Model and Gumperz's Interactional Sociolinguistics provided a dual lens for analyzing both the macro-sociological and micro-interactional aspects of bilingual discourse.

The study further established that while existing Western theoretical frameworks must be localized to account for African multilingual complexities rather than dismissed outright Theoretical localization is necessary to capture indigenous speech norms, politeness conventions, and power dynamics that shape language behavior in African societies.

Finally, the study emphasized that code-switching is a resourceful bilingual practice that reflects linguistic flexibility and communicative competence. When properly integrated into Nigeria's educational system, it can serve as a tool for bridging the linguistic gap between home and school, improving students' understanding, and promoting the sustainability of indigenous languages in a globalized world.

Recommendations

Based on the findings and analyses, the following recommendations are proposed:

a. Policy Reorientation

Nigeria's language-in-education policy should be reviewed to incorporate code-switching as a legitimate pedagogical practice Policy should balance the functional roles of English and indigenous languages rather than impose linguistic exclusivity

b. Curriculum Design and Implementation

Curricula at all levels should include bilingual instructional frameworks where code-switching is methodically applied to clarify meaning, reduce linguistic barriers, and enhance learner engagement. Educational planners should collaborate with linguists to create context-sensitive materials reflecting authentic bilingual usage.

c. Teacher Professional Development

Teachers should be guided to employ code-switching deliberately for pedagogical and communicative effectiveness. Workshops and professional courses should emphasize strategies for controlled, meaningful, and context-appropriate code alternation. Teacher education institutions should include sociolinguistic modules to deepen understanding of bilingual discourse functions.

d. Technological Empowerment

Government agencies and private organizations should invest in AI-based language technologies—including speech recognition, automated translation, and digital dictionaries—for indigenous Nigerian languages. Such innovations will modernize language teaching and preserve linguistic diversity in the digital era.

e. Public Awareness and Attitude Change

Societal perceptions that stigmatize indigenous language use must be transformed through targeted educational and media interventions. By promoting positive attitudes toward indigenous languages, Nigeria can cultivate linguistic confidence and national identity rooted in cultural pluralism.

References

- Abutalebi, J., & Green, D. W. (2016). Neuroimaging of language control in bilinguals: Neural adaptation and reserve. *Bilingualism: Language and Cognition*, 19(4), 689–698
- Adetugbo, M. (2016). *Artificial intelligence and the sustainability of indigenous languages in Nigeria*. *Journal of Language and Technology*, 11(2), 45–62
- Akinbiyi, A. (2019). *Language and identity in Nigerian bilingual education*. Concept Publications.
- Bamgbose, A. (2011). African languages today: The challenge of and prospects for empowerment under globalization. *Nordic Journal of African Studies*, 20(2), 1–18.
- Deuchar, M., Davies, P., & Carter, D. (2018). *Code-switching in bilingual studies: Corpus approaches to language contact*. University Press. education. Macmillan..
- Ezeani, I., & Ogu, C. (2022). Technological challenges in African psycholinguistic research. *Applied Linguistics Today*, 14(3), 233–248.
- Ezeh, N. G. (2022). *Code-switching and code-mixing in teaching and learning: implications for classroom practice*. [ERIC fulltext]. (Classroom study reporting pedagogical benefits of CS).
- Fairclough, N. (2010). *Critical discourse analysis: The critical study of language*. Routledge.
- Federal Ministry of Education. (2014). *National Policy on Education*. NERDC Press.
- Green, D. W., & Abutalebi, J. (2013). Language control in bilinguals: The adaptive control hypothesis. *Journal of Cognitive Psychology*, 25(5), 515–530.
- Ihemere, K. (2016). *Codeswitching in Igbo–English bilingualism*. University of Westminster / WestminsterResearch.
- Ihemere, K. C. (2016). Igbo–English intrasentential code-switching and the Matrix Language Frame model. In *Diversity in African Languages* (pp. 31–44). Language Science Press.
- Kroll, J. F., & Bialystok, E. (2013). Understanding the consequences of bilingualism for language processing and cognition. *Journal of Cognitive Psychology*, 25(5), 497–514
- Myers-Scotton, C. (1993). *Social motivations for codeswitching: Evidence from Africa*. Clarendon Press.
- Okoye, P. N. (2021). Cognitive perspectives on bilingual language control among Nigerian English-. In E. Petzell & L. Hammarström (Eds.), *Diversity in African languages* (pp. 31–44). Language Science Press.
- Otagburuagu, E., & Okorji, R. (2021). Translanguaging, code-switching, and effective classroom communication in Nigeria. *International Journal of Multilingual Education*, 7(2), 100–118.
- Poplack, S. (2018). *Borrowing: Loanwords in the speech community and in the grammar*. Oxford University Press.

Umeodinka, F. (2021). Empirical issues in studying code-switching among Nigerian bilinguals. *Studies in Language and Society*, 13(2), 103–119