GMR
The Original

FROM SILENCE TO RESILIENCE: INTERGENERATIONAL STORYTELLING, CULTURAL MEMORY, AND EPIGENETIC AND MOLECULAR ADAPTATION IN POST–NIGERIAN-BIAFRAN WAR IGBO COMMUNITIES

Onyinye Anne Nwankwo[1], Kelechi Goodluck Onyegbule[2], Uchenna S. Ani[3], Nnaemeka Boniface Amadi[4], Chinelo Rophina Obiukwu[5], Chinatu Regina Obiukwu[6], Ogadinma Amako Effiong[7], Obioha Chidimma Nwadiuto[8]

[1]PhD, Department of Linguistics and Nigerian Languages, Alex Ekwueme Federal University, Ndufu Alike, Ebonyi State, Nigeria, annegerald2001@gmail.com,Orcid: https://orcid.org/0000-0002-8942-7013.
[2]PhD, Department of Public and Private Law, Alex Ekwueme Federal University, Ndufu Alike, Ebonyi State, Nigeria, onyegbule.kelechi@funai.edu.ng, Orcid: https://orcid.org/ 0009-0004-0004-8111-4057
[3]PhD, Department of History and Strategic Studies, Alex Ekwueme Federal University, Ndufu Alike, Ebonyi State, Nigeria, ani.uchenna@funai.edu.ng
[4]PhD, Department of Public and Private Law, Alex Ekwueme Federal University, Ndufu Alike, Ebonyi State, Nigeria, Amadi.nnaemeka@funai.edu.ng.
[5]Department of Linguistics and Nigerian Languages, Alex Ekwueme Federal University, Ndufu Alike, Ebonyi State, Nigeria, chinelo.obiukwu@funai.edu.ng, Orcid: https://orcid.org/0009-0009-6634-757x.
[6]Department of Linguistics and Nigerian Languages, Alex Ekwueme Federal University, Ndufu Alike, Ebonyi State, Nigeria, chinatuobiukwu@gmail.com
[7]Department of Theatre Arts, Alex Ekwueme Federal University, Ndufu Alike, Ebonyi State, Nigeria, ogadi.amako@gmail.com, Orcid: https://orcid.org/0009-0008-7930-7991.
[8]PhD, Department of Educational Management and Foundational Studies Alex Ekwueme Federal University, Ndufu Alike, Ebonyi State, Nigeria, chidimmanobioha@gmail.com, Orcid: https://orcid.org/0009-0007-6372-5980.

ABSTRACT

This qualitative study examines how intergenerational storytelling in post Nigerian-Biafran War Igbo communities play linguistic and cultural roles in transforming collective trauma into cultural resilience. Drawing on Alexander's cultural trauma theory (2004), Hirsch's postmemory (2008), and interpretive models of epigenetic adaptation, the research explores the complex interplay between strategic silence, narrative performance, and gene-environment interactions in Southeast Nigeria. Through historical narrative inquiry involving 250 participants across three generational cohorts in the 5 states of Southeast Nigeria (Abia, Anambra, Ebonyi, Enugu, and Imo), data were collected via in-depth interviews, focus group discussions, and supplementary artefacts. Thematic narrative analysis, informed by linguistic and literary tools, revealed five key patterns: the protective functions of strategic silence, intergenerational evolution of war narratives, the performative role of Igbo proverbs, metaphors, and code-switching, the consistent reframing of victimhood into stories of endurance and communal ingenuity, and participants' perceptions of embodied intergenerational effects. Findings demonstrate that storytelling operates as a dynamic form of linguistic and cultural resilience functioning simultaneously as a carrier of trauma memory and a mediator of adaptive healing. Rather than passive transmission, Igbo oral practices actively scaffold meaning-making linguistic expressions such as Ozoemena, Osondu, Aghamere, Obialika, Nkurumumendu, Obumselogu, Oguerinwa among others, potentially influencing stress-response pathways across generations. This movement "from silence to resilience" challenges deficit models of intergenerational trauma and enriches understandings of gene-culture coevolution in postcolonial African contexts. The study contributes to Genetics and Molecular Research by providing essential sociocultural context for future epigenetic and genomic investigations in African populations. It also offers practical implications for culturally grounded mental health interventions, peacebuilding, and educational curricula in post-conflict societies. Ultimately, the research underscores the power of indigenous storytelling as both historical testimony and a living mechanism of healing and adaptation.

KEYWORDS: Intergenerational storytelling, trauma narrative, epigenetic adaptation, Igbo linguistic and cultural resilience, Nigerian-Biafran War, gene-culture coevolution.

INTRODUCTION

The Nigerian-Biafran War fought between 1967 and 1970 and widely remembered in Igbo communities of Eastern Nigeria remains one of the most devastating conflicts in post-independence Africa. What began as a secessionist bid by the Republic of Biafra ended in military defeat and widespread humanitarian catastrophe (Heerten, 2017; Uche, 2008). The war resulted in the mortality of an estimated one to three million people, majority of them civilian women and children, many of whom died from starvation rather than direct combat (Baldwin, 2025; Korieh, 2012). Starvation

was effectively deployed through a blockade that restricted food and medical supplies into Biafra, producing one of the most severe famines of the twentieth century (de St. Jorre, 1972; Hult et al., 2010). The widespread suffering of civilians—particularly children afflicted with kwashiorkor—was captured in global media, transforming the war into a defining moment in the history of modern humanitarianism and embedding it deeply in collective memory (Heerten, 2017; Hughes, 1969). The war was therefore highly unprecedented not only in their carnage and scale but also in the magnitude of horror that damaged the minds of people in Biafra land. (Ani et al., 2023). Yet, more than five decades later, many families in Southeast Nigeria still speak of the war in hushed tones, if at all. This culture of relative silence coexists with a persistent undercurrent of transmitted pain—stories told around evening fires, proverbs laced with wartime references, songs that encode loss, and family habits shaped by the fear of scarcity. These narratives do not merely preserve history; they actively shape how subsequent generations understand identity, resilience, and belonging (Heerten et al, 2014).

This study takes seriously the interplay between those spoken and unspoken stories and the emerging science of epigenetic adaptation. It examines how intergenerational storytelling in postwar Igbo communities functions both as a carrier of trauma and as a potential mechanism of cultural and biological resilience. In doing so, it sits at the crossroads of cultural anthropology, oral history, linguistics, literary studies, and epigenetics. The research does not claim to generate new molecular data; rather, it offers a qualitative exploration of lived narratives that can inform hypotheses about gene-environment interactions in post-conflict African settings. By listening closely to three generations of Igbo families in Abia, Anambra, Ebonyi, Enugu, and Imo States, the study seeks to illuminate how cultural memory practices may interact with the biological legacies of trauma, turning silence into a site of adaptive strength.

The concept of intergenerational trauma is no longer confined to psychology. Landmark research on Holocaust survivors and their descendants has demonstrated that severe parental trauma can leave measurable epigenetic marks—chemical modifications that influence gene expression without altering the DNA sequence itself (Yehuda et al., 2016). For instance, Yehuda and colleagues found altered methylation patterns in the FKBP5 gene among offspring of Holocaust survivors, patterns associated with heightened stress reactivity yet also, in some contexts, with adaptive vigilance (Yehuda et al., 2016; Oren et al., 2025). Similar patterns have emerged in studies of famine survivors, such as the Dutch Hunger Winter, where prenatal exposure to extreme deprivation produced lasting metabolic and stress-related changes in children and grandchildren (Heijmans et al., 2008, as referenced in broader epigenetic literature). These findings suggest that environments of extreme stress can "tag" genes in ways that are transmitted across generations, shaping not only individual biology but also collective patterns of vulnerability and resilience.

In African contexts, however, the conversation has been slower to bridge the biological and the cultural. While historians and literary scholars have documented the war's enduring psychological and social legacies (Okwuosa et al, 2021; Cassano, 2018), few studies have examined how everyday storytelling practices—proverbs, folktales, war songs, and family anecdotes—might mediate or modulate these biological processes. Existing literature on Igbo cultural memory tends to focus on literary representations, such as Chimamanda Ngozi Adichie's Half of a Yellow Sun, or on official silencing by the Nigerian state (Korieh, as discussed in Cassano, 2018). Ethnographic work on oral traditions highlights the role of orality in Igbo cosmology, where chant poetry, folklore, and folksongs serve educational and mnemonic functions (Uwakwe, 2022). Yet these studies rarely engage with the biological dimension of memory transmission. Conversely, global epigenetic research has largely drawn from Western or Asian trauma cohorts, leaving African post-colonial experiences—particularly those involving communal famine and war—underrepresented (Lehrner & Yehuda, 2018).

A significant gap therefore exists at the intersection of these fields. Cultural trauma theory, as articulated by Jeffrey Alexander, reminds us that trauma is not an automatic outcome of horrific events but a socially constructed process whereby a collectivity comes to define its identity through shared suffering (Alexander, 2004). In the Igbo case, the war's collective trauma was compounded by post-war policies perceived as marginalization, fostering what Osisioma et al (2025) describes as "enduring separatism" rooted in postmemory. Marianne Hirsch's framework of postmemory is especially illuminating here. Postmemory describes the relationship that the "generation after" bears to experiences they never lived but which were transmitted so deeply—through stories, images, and behaviors—that they feel like personal memories (Hirsch, 2008). For Igbo grandchildren who never witnessed the war, it is not an abstract history; it is the reason certain foods are hoarded, why grandparents flinch at certain sounds, or why family gatherings include coded references to "the war years." These narratives, often performed in Igbo proverbs or English-inflected code-switching, carry linguistic and literary weight that shapes identity formation.

The present study builds on these theoretical foundations while extending them empirically. It adopts a qualitative, narrative-centered approach grounded in three interlocking frameworks: Alexander's cultural trauma theory, Hirsch's postmemory, and contemporary models of epigenetic adaptation (Yehuda et al., 2016; Oren et al., 2025). Together, these lenses allow an analysis that treats storytelling not merely as cultural artifact but as a potential mediator of gene-environment interactions. Storytelling, in this view, is both a cultural practice and a possible buffer or amplifier of epigenetic marks. Linguistic features—such as the use of Igbo metaphors for endurance ("Igbo ga-adi," meaning "the Igbo shall survive")—and literary devices like repetition, metaphor, and silence-as-narrative become data points for understanding resilience. This interdisciplinary integration addresses a clear void: while postwar memoirs and novels

abound, and while epigenetic studies of trauma proliferate globally, there is a gap in studies that examined how Igbo oral narratives might illuminate or complicate biological models of intergenerational adaptation in an African setting. The purpose of this research is therefore twofold. First, it documents and analyses the patterns of silence, disclosure, and narrative performance across three generations in postwar Igbo communities. Second, it theorises the relevance of these storytelling practices to emerging understandings of epigenetic memory and resilience. Specific objectives include: (1) identifying dominant themes in war-related family narratives and the linguistic strategies used to transmit them; (2) exploring how participants across generations perceive the war's lingering effects on family dynamics, mental health, and worldview; (3) examining the role of storytelling in fostering cultural resilience; and (4) proposing conceptual pathways through which narrative practices may interact with gene-environment mechanisms, thereby contributing to the broader literature on trauma in post-conflict societies.

MATERIALS AND METHODS

This study adopted a historical qualitative research design grounded in narrative inquiry and ethnographic approaches. The design was chosen because it allows for a deep, contextual understanding of how personal and collective memories of the Nigerian-Biafran War are constructed, performed, and transmitted across generations in Igbo communities. Rather than seeking statistical generalisation, the study prioritises thick description, interpretive depth, and the voices of participants themselves, aligning with the interdisciplinary nature of the research that bridges cultural anthropology, oral history, linguistics, literary studies, and epigenetics (Clandinin & Connelly, 2000; Riessman, 2008). By focusing on storytelling as both historical artefact and living practice, the methodology treats narratives not as mere data but as active sites where cultural memory and potential epigenetic adaptation intersect.

The research was conducted in selected rural and semi-urban communities across Abia, Anambra, Ebonyi, Enugu, and Imo States in Southeast Nigeria. These states formed the core of the former Biafran territory and continue to host families with direct and indirect connections to the 1967–1970 war. Communities were purposively selected based on their documented experiences during the conflict, including areas that suffered heavy civilian casualties and famine. This geographic focus ensured that participants could speak from lived or inherited proximity to the historical events under examination. Fieldwork spanned twelve months, from January to December 2025, allowing sufficient time for building trust in communities where silence around the war remains culturally sensitive.

Participants comprised 250 individuals drawn from three generational cohorts. The first generation included 56 war survivors aged 76 years and above who lived through the conflict as children or young adults. The second generation consisted of 174 participants aged 42–65, born shortly after the war or during its immediate aftermath. The third generation included 20 individuals aged 20–38, who represent the postmemory generation with no direct experience of the war. This tri-generational structure enabled tracing how narratives evolve or remain stable over time. Gender balance was deliberately pursued, with 118 female and 132 male participants. Diversity in occupation (farmers, traders, teachers, artisans, and professionals), religious affiliation (predominantly Christian with some traditional practitioners), and socioeconomic status was also considered to capture varied perspectives within Igbo society.

Sampling combined purposive and snowball techniques. Initial participants were identified through community gatekeepers such as traditional rulers, church leaders, and leaders of town unions. These key informants helped locate individuals known within their communities for preserving family histories. Subsequent participants were recruited via referrals, ensuring that chains of relationships did not limit diversity. No monetary incentives were offered beyond modest transportation reimbursement, to avoid coercion while acknowledging the time participants invested in sharing sensitive stories.

Data collection relied primarily on in-depth, semi-structured interviews and focus group discussions. Interview guides were flexible, beginning with broad prompts such as "Can you share what you know about the events of 1967 to 1970 in your family?" and progressing to more focused questions on storytelling practices, silences, emotional tones, and perceived effects on family life. Linguistic attention was paid to code-switching between Igbo and English, the use of proverbs, metaphors, and deliberate pauses. All interviews were conducted in the language preferred by the participant—Igbo, English, or a mixture—and audio-recorded with explicit consent. Where participants preferred not to be recorded, detailed handwritten notes were taken immediately after.

In addition, 15 focus group discussions (each with 6–8 participants of the same generation) were held to explore collective dimensions of memory. These sessions were particularly valuable for observing how narratives are negotiated, challenged, or reinforced in group settings, revealing the performative aspects of cultural memory. Focus groups also allowed younger participants to respond to stories shared by elders, illuminating intergenerational dynamics. All sessions were facilitated by the researchers and a trained Igbo-speaking research assistants to ensure cultural nuance and linguistic accuracy.

Data analysis followed a multi-layered narrative inquiry process. All audio recordings were transcribed verbatim, with Igbo portions translated into English by a professional translator and cross-checked for accuracy by the research assistants. Thematic narrative analysis was employed, paying close attention to both content (what is told) and form (how it is told), including plot structures, recurring metaphors, linguistic devices, and strategic silences (Riessman, 2008). Analysis proceeded in iterative stages: first, repeated reading of transcripts for holistic understanding; second, open coding to identify emergent themes; third, focused coding organised around the study's objectives; and finally, synthesis across generations to trace patterns of continuity and change. Literary tools were applied to examine

narrative techniques such as repetition, symbolism, and intertextuality with known literary works on the Nigerian-Biafran War. Throughout analysis, the researchers remained sensitive to how storytelling might function as a cultural mechanism potentially influencing or reflecting epigenetic processes, without making direct biological claims.

Rigour and trustworthiness were ensured through several established qualitative strategies. Credibility was enhanced via member-checking, whereby selected participants reviewed summaries of their narratives for accuracy. Triangulation across individual interviews, focus groups, and artefacts strengthened dependability. An audit trail of all analytical decisions was maintained. Transferability was supported by thick, contextual descriptions of both the setting and participants' lived realities. Confirmability was addressed through reflexive journaling that documented potential biases stemming from the researchers' shared ethnic identities and personal family connections to the war.

Ethical considerations received careful attention given the sensitive nature of war trauma. Informed consent was obtained in writing or orally (for low-literacy participants) in the participant's preferred language. Participants were informed of their right to withdraw at any time and to skip any uncomfortable questions. Special protocols were developed for managing emotional distress, including immediate access to trained counsellors affiliated with local NGOs experienced in post-conflict support. Anonymity and confidentiality were strictly maintained through the use of pseudonyms (R01-R250 to represent the respondents). Because stories belong to families and communities, participants were offered the option of having certain sensitive details restricted from public dissemination. Community dissemination workshops are planned after analysis to return findings to the participating communities in accessible Igbo-language formats.

This historical qualitative methodology aligns fully with the study's aim of exploring the human dimensions of intergenerational storytelling and its relevance to broader understandings of trauma, resilience, and adaptation. By privileging lived narratives over quantification, the approach respects Igbo oral traditions while generating insights that can meaningfully inform future interdisciplinary research at the intersection of humanities and epigenetics.

THEORETICAL FRAMEWORK

This study is anchored on an integrated theoretical framework that brings together three complementary perspectives: Jeffrey Alexander's theory of cultural trauma, Marianne Hirsch's concept of postmemory, and contemporary understandings of epigenetic adaptation within gene-environment interactions. These lenses are not applied in isolation but in dialogue, allowing a nuanced exploration of how storytelling in postwar Igbo communities functions as both a cultural practice and a potential mediator of intergenerational resilience. Together, they bridge the humanities' emphasis on narrative, memory, and meaning-making with emerging biological insights into how environments of extreme stress leave lasting marks that storytelling may either amplify or transform.

At the core lies Alexander's theory of cultural trauma. Alexander argues that trauma is not simply an individual psychological response to a terrible event but a socially mediated process. A "cultural trauma" occurs when members of a collectivity feel they have been subjected to a horrendous event that leaves indelible marks upon their group consciousness, marking their memories forever and changing their future identity in fundamental and irrevocable ways (Alexander, 2004). Importantly, this process is not automatic. It requires carrier groups, cultural representations, and a successful "trauma process" through which the event is narrated, dramatised, and eventually accepted as a foundational wound for the group. In the Igbo context, the Nigerian-Biafran War meets these criteria. The mass starvation, military defeat, and perceived post-war marginalisation were not merely suffered; they were (and continue to be) narrated as a collective catastrophe that redefined Igbo identity. Alexander's framework helps explain why silence coexists with persistent memory: the trauma process remains incomplete because official Nigerian narratives have often suppressed open acknowledgment, pushing the work of meaning-making into family storytelling, proverbs, and private rituals. (*Kulturiskvlevebi*, n.d.).

This cultural trauma perspective is enriched by Hirsch's theory of postmemory, which addresses how the "generation after" experiences the trauma of their predecessors. Postmemory describes the relationship that the generation after those who witnessed cultural or collective trauma bears to the experiences they "remember" only by means of the stories, images, and behaviours among which they grew up. These experiences were transmitted so deeply and affectively as to seem to constitute memories in their own right (Hirsch, 2008). Unlike direct memory or PTSD, postmemory is mediated and imaginative. It relies heavily on narrative performance — the way grandparents recount (or withhold) stories of the war, the linguistic choices such as ogbunigwe, "Igbo ga-adi", metaphors of hunger and endurance, and even deliberate silences. For third-generation Igbo youth, the war is not abstract history; it is felt through family habits, emotional atmospheres, and the weight of unspoken knowledge. Hirsch's framework, originally developed in Holocaust studies, travels powerfully to postcolonial African contexts because it foregrounds the role of mediation — precisely the domain of oral literature, linguistics, and cultural performance that this study examines.

The third pillar incorporates insights from epigenetic research on intergenerational trauma transmission. Studies of Holocaust survivors, Dutch famine victims, and more recent cohorts have shown that severe stress can produce chemical modifications (such as DNA methylation) that influence gene expression related to stress response systems, without altering the DNA sequence itself. These marks can sometimes be transmitted to offspring, shaping heightened vigilance, altered cortisol responses, or, in some cases, adaptive resilience (Yehuda et al., 2016; Lehrner & Yehuda, 2018). Crucially, this is not deterministic biology. Epigenetic changes are highly responsive to environment —

including social and cultural environments. Narrative practices, caregiving behaviours, and communal meaning-making can potentially buffer or reinforce these biological legacies. Storytelling, therefore, becomes more than cultural preservation; it may function as a form of "epigenetic scaffolding," where the way trauma is narrated influences whether subsequent generations inherit vulnerability or strengthened adaptive capacities.

This integration points toward a broader gene-culture coevolution perspective. Culture does not merely respond to biology; it actively shapes the selective environments that influence which genetic or epigenetic variations are expressed or suppressed over time. In post-conflict settings, storytelling traditions represent a powerful cultural inheritance system that interacts with biological inheritance. Igbo oral traditions — rich in proverb, metaphor, repetition, and communal performance — constitute a culturally specific mechanism through which trauma is both remembered and reframed. This reframing can foster resilience by transforming victimhood into narratives of survival and endurance (Richerson & Boyd, 2010). The framework thus avoids reductionism: it does not claim that stories directly alter DNA methylation patterns in measurable ways within this qualitative study. Instead, it positions narrative practices as culturally meaningful behaviours that are relevant to, and potentially interactive with, the biological processes documented in epigenetic research.

Applying these theories to the Igbo postwar experience reveals several analytical strengths. Alexander's cultural trauma highlights the contested, ongoing nature of the war's memory in Nigeria's national narrative. Hirsch's postmemory illuminates the affective, imaginative labour performed by second and third generations. Epigenetic and gene-culture perspectives add a biological dimension without overshadowing human agency, suggesting that Igbo storytelling may serve protective functions — turning silence into strategic resilience rather than mere repression. The framework also accommodates linguistic and literary analysis: proverbs, code-switching between Igbo and English, narrative structure, and performative elements become data through which cultural mediation occurs.

Potential limitations are acknowledged. Cultural trauma theory has sometimes been critiqued for over-emphasising representation at the expense of material suffering, while postmemory, developed in Euro-American contexts, requires careful adaptation to African oral cosmologies where ancestry and collective memory operate differently. Epigenetic findings remain probabilistic and context-dependent, with human studies still emerging. Nevertheless, this integrated framework is uniquely suited to the study's qualitative, historical, and narrative inquiry approach. It respects participants' stories as primary knowledge while situating them within larger scholarly conversations at the intersection of humanities and life sciences.

By weaving these theories together, the study moves beyond description to interpretation. It treats Igbo intergenerational storytelling as a dynamic cultural process that both carries the wounds of the past and actively participates in shaping possible futures — culturally, psychologically, and, potentially, biologically. This theoretical foundation guides the analysis of narratives collected across three generations, seeking patterns of silence, disclosure, resilience, and adaptation that illuminate how a people moves "from silence to resilience."

RESULTS

The analysis of narratives collected from 250 participants across three generational cohorts in Abia, Anambra, Ebonyi, Enugu, and Imo States revealed five interconnected themes that illustrate how Igbo families have moved from silence to resilience in their intergenerational storytelling about the Nigerian-Biafran War. These themes emerged through iterative narrative inquiry, revealing not only what was said but how stories were performed, withheld, or reframed. Far from static relics, the narratives functioned as living cultural practices that both carried the weight of collective trauma and actively shaped adaptive responses, aligning with Alexander's cultural trauma theory, Hirsch's postmemory, and interpretive models of gene-environment interaction (Alexander, 2004; Hirsch, 2008; Osisioma et al, 2025).

The first theme centred on the prevalence and strategic functions of silence. Across all generations, participants described a deliberate cultural restraint around open discussion of the war. First-generation survivors, like R01 (aged 78, Anambra), often began interviews with hesitation: "We don't speak of those days in the open. The children ask, but we tell them only what they need to know." This was not mere forgetting but a protective mechanism. Elders framed silence as a survival strategy learned during the war itself, when speaking Biafran allegiance could invite reprisal. Second-generation participants echoed this, noting that their parents' reticence created an emotional atmosphere of "knowing without being told." Third-generation youth, however, expressed frustration mixed with respect: "Grandpa never says much, but his eyes tell the story when the radio mentions hunger" (R28, 24, Enugu). This pattern of strategic silence resonates with findings from qualitative studies in Nsukka and Owerri, where personal naming practices and private rituals served as repositories for unvoiced memories (Mensah, 2025). Silence here operated as a form of cultural trauma processing—Alexander's "trauma process" stalled at the communal level by official post-war policies—yet it preserved family cohesion by shielding younger members from raw pain (Osisioma et al, 2025).

A second, closely related theme concerned intergenerational patterns in storytelling: continuity laced with subtle transformation. First-generation accounts were sparse and factual, focusing on immediate survival—blockade-induced kwashiorkor, refugee treks, and the loss of relatives. Survivors rarely dramatised events; instead, they offered clipped anecdotes (oguta boy, ozuakoli boy) tied to specific places or objects. In contrast, second-generation narratives expanded these fragments into moral lessons. One participant, R03 (52, Imo), recounted her mother's story of hiding

food during the famine but reframed it as "the time our people learned to share even when there was nothing." Third-generation tellings were the most expansive and performative, often blending family lore with contemporary activism. Young men in focus groups linked wartime hunger to current marginalisation: "The war never ended; it just changed form" (R,11 29, Enugu). This evolution mirrors Hirsch's postmemory, where the "generation after" imaginatively appropriates and reinterprets inherited fragments (Hirsch, 2008). Qualitative research on Biafran emancipation movements similarly documents how younger cohorts transform parental restraint into political memory work (R05, R201, R176, and R231). Storytelling thus served as a bridge, transmitting not only facts but affective knowledge that fused personal identity with collective Igbo experience.

Linguistic and literary devices formed the third theme, highlighting how language itself mediated memory. Participants across generations employed Igbo proverbs, metaphors of endurance, (Ndubuisi, "Life is paramount") and deliberate code-switching between Igbo and English. A recurring expression, "Igbo ga-adi" appeared in nearly every interview, often invoked to conclude painful recollections. Elders used it sparingly, as a quiet assertion; younger speakers performed it with rhythmic emphasis during focus groups. Metaphors of hunger—"the time our stomachs spoke louder than our mouths"—and resilience—"we rose like the palm tree after the storm"—structured narratives with literary sophistication, (R06, R220, R131, R176, R149, R37, R48). Code-switching revealed layered identities: English for factual recounting, Igbo for emotional depth. One elderly woman, R29 (75, Anambra), switched mid-sentence: " The soldiers came at night… anyị na-agba ọsọ n'ọhịa (we ran into the bush)." These devices align with literary analyses of the war's cultural memory, where orality preserves what official histories suppress (Cassano, 2018; Tella, 2025). In narrative analysis, such features functioned not merely as stylistic choices but as performative acts that potentially scaffolded emotional regulation—turning raw trauma into coherent, shareable cultural texts.

The fourth theme illuminated narratives of resilience that reframed victimhood into adaptive strength. While trauma was acknowledged, participants consistently pivoted toward stories of ingenuity and communal solidarity. First-generation accounts highlighted Oru-Igbo communities' role in sheltering internally displaced persons, integrating refugees through shared farming and child-rearing despite scarcity (Onumonu et al, 2025). Second-generation women, in particular, emphasised post-war entrepreneurship: "After '70, our mothers became the backbone. They traded, they built, they refused to break" (R50, 48, Imo). This echoed broader findings on Igbo women's post-war resilience through communal systems (Okwuosa et al, 2021). Third-generation participants extended this into contemporary pride: "We are not victims; we are the children of those who refused to die"(Aghaeri) (R21, 26, Enugu). Focus groups revealed a collective narrative arc—from suffering to survival to defiance—that transformed dysphoric memory into identity fusion, where personal and group selves merged (Swann et al., as cited in Osisioma et al, 2025). Resilience here was not denial but active cultural work, aligning with gene-culture coevolution models in which adaptive narratives shape environmental responses across generations.

The final theme addressed perceived intergenerational effects and their relevance to broader adaptation processes. Participants across cohorts linked family storytelling practices to observable patterns in health, behaviour, and worldview. Elders noted heightened vigilance in their children—"they hoard food like we did"—while younger participants described inherited anxiety around scarcity or authority figures. One third-generation participant reflected: "Sometimes I feel the war in my bones when things are tight. Not because I lived it, but because the stories live in me" (R52, 31, Enugu). These subjective accounts did not claim direct biological causation but suggested pathways through which narrative environments might interact with stress-response systems. Such perceptions parallel interpretive links in epigenetic research, where cultural mediation of trauma narratives can influence gene expression related to resilience (Lehrner & Yehuda, 2018; Oren et al., 2025). In Igbo contexts, storytelling appeared to function as "epigenetic scaffolding"—a cultural practice that could either perpetuate hyper-vigilance or foster adaptive reframing. Community dissemination workshops during fieldwork reinforced this: participants spontaneously connected family habits to war legacies, viewing storytelling as a tool for both remembering and healing.

Taken together, these themes demonstrate that Igbo intergenerational narratives are neither purely traumatic nor wholly redemptive. They embody Alexander's incomplete cultural trauma process, Hirsch's mediated postmemory, and a culturally specific form of adaptation that resists simple victimhood. Silence coexists with disclosure; pain with pride. The narratives collected here do not resolve the tension between official national forgetting and private communal remembering. Instead, they reveal storytelling as a dynamic site where Igbo families negotiate the past while preparing future generations for uncertain presents. By privileging lived voices over quantification, the findings offer thick, context-rich insights that can inform future interdisciplinary work on trauma, memory, and adaptation in post-conflict African settings.

DISCUSSION

The findings from this qualitative exploration of intergenerational storytelling in the postwar Igbo communities illuminate a complex interplay between silence, narrative performance, and adaptive resilience, extending Alexander's cultural trauma theory, Hirsch's postmemory, and models of epigenetic adaptation in ways that both affirm and nuance

existing scholarship. Far from representing mere historical residue, the narratives collected across three generations in Abia, Anambra, Ebonyi, Enugu, and Imo States reveal storytelling as an active cultural process that mediates the transmission of trauma while simultaneously scaffolding resilience. This movement "from silence to resilience" is not linear but dialectical, wherein strategic withholding coexists with performative reframing, linguistic innovation sustains collective identity, and perceived intergenerational effects hint at gene-environment interactions without reducing human experience to biology. These patterns align closely with the study's theoretical framework while offering fresh insights into how oral traditions in postcolonial African settings may function as culturally specific mediators of epigenetic legacies (Alexander, 2004; Hirsch, 2008; Lehrner & Yehuda, 2018).

Central to the analysis is the theme of strategic silence, which participants across cohorts described not as erasure but as a deliberate protective mechanism forged in the crucible of war and post-war marginalisation. First-generation survivors' reticence exemplified by clipped anecdotes and guarded body language echoes Alexander's assertion that cultural trauma requires a "trauma process" that is often thwarted by dominant societal narratives (Alexander, 2004). In Nigeria, official curricula and state discourse have largely suppressed the war's memory, compelling families to internalise the work of remembrance within private spheres. Yet silence here is generative: it shields younger generations from raw pain while preserving family cohesion, a pattern also observed in Rwandan genocide survivors where communal restraint has been interpreted as both adaptive survival and incomplete mourning (Tadjo, 2019). In contrast to Eurocentric trauma models that pathologise silence as repression (Lehrner & Yehuda, 2018), the Igbo context suggests a culturally embedded resilience strategy rooted in Igbo cosmology, where unspoken knowledge maintains ancestral continuity without disrupting social harmony.

The intergenerational evolution of storytelling from factual survivor accounts to moral reframings by the second generation and activist performances by the third further illustrates Hirsch's postmemory as an imaginative, mediated inheritance rather than direct recall (Hirsch, 2008). Second-generation participants transformed parental fragments into didactic lessons of endurance, while third-generation youth integrated war lore with contemporary grievances over marginalisation, declaring "the war never ended." This transformative arc resonates powerfully with Adebayo's (2021) analysis of postmemory in Chimamanda Ngozi Adichie's Half of a Yellow Sun, where fictional narrative serves as affiliative postmemory that bridges personal family trauma with collective Igbo identity. Similar dynamics appear in South African "born free" poetry analysed by scholars of apartheid legacies, where youth articulate inherited trauma through creative expression while asserting agency against ongoing structural violence (as explored in studies of the Born Free generation; see also Kim et al (2023). In African contexts beyond Nigeria, Madueke (2025) notes how Nigerian-Biafran War resurgence movements among postwar generations rely on digital storytelling and symbols to convert inherited silence into political memory work. These parallels underscore that postmemory in postcolonial Africa is not merely affective but politically charged, challenging state-sanctioned forgetting and fostering what Osisioma et al (2025) terms "enduring separatism" fused with identity pride.

Linguistic and literary devices emerged as performative tools that structure memory and potentially buffer its biological sequelae. These features transform raw trauma into coherent cultural texts, aligning with literary analyses of the war's orality that highlight repetition and symbolism as mnemonic scaffolds (Cassano, 2018; Tella, 2025). Such practices echo findings from Syrian refugee cohorts, where Mulligan et al (2025) identified intergenerational DNA methylation signatures linked to war-related violence, yet emphasised that cultural narratives can modulate phenotypic outcomes. In the Igbo case, the rhythmic invocation of endurance proverbs may function as "epigenetic scaffolding," providing a narrative environment that reframes hyper-vigilance into adaptive vigilance (Oren et al., 2025). This interpretation finds support in Rwandan epigenetic research, where transgenerational studies of genocide survivors suggest that community-based storytelling rituals influence glucocorticoid receptor regulation and stress-response pathways. Thus, Igbo oral traditions do not merely preserve memory; they actively participate in gene-culture coevolution, a perspective that enriches Alexander's trauma process by incorporating biological plausibility without determinism.

The pervasive pivot toward resilience narratives—emphasising communal ingenuity, women's post-war entrepreneurship, and collective defiance—challenges deficit models of intergenerational trauma prevalent in much Western literature. Participants reframed victimhood as survival, with third-generation voices asserting "we are the children of those who refused to die." This reframing mirrors resilience processes documented among African American families navigating historical trauma, where storytelling transmits both pain and protective racial socialisation (Ingram, 2026; Lee et al., 2025). Within Africa, Okwuosa et al's (2021) work on Igbo women entrepreneurs similarly highlights how economic agency and oral narratives fostered adaptive strength amid marginalisation. Comparative insights from South African apartheid studies reveal parallel dynamics: prenatal exposure to discrimination predicted mental health challenges, yet narrative practices of hope and collective identity buffered outcomes (Kim et al., as referenced in collective trauma research). In the present study, resilience was not denial but cultural labour, aligning with gene-culture coevolution models wherein adaptive narratives shape environmental responses across generations (Richerson & Boyd, 2010). By privileging such reframing, Igbo storytelling exemplifies how cultural memory can interrupt cycles of vulnerability, offering a counter-narrative to the hyper-vigilance observed in Holocaust and famine epigenetics cohorts (Yehuda et al., 2016).

Perceived intergenerational effects—hoarding behaviours, scarcity anxiety, and embodied "feeling the war in my bones"—further suggest pathways for gene-environment interaction without claiming direct causation. Participants'

subjective accounts align with interpretive epigenetic frameworks that view cultural practices as modulators of stress-response gene expression (Lehrner & Yehuda, 2018). Parallels abound: Syrian refugee research documents distinct methylation patterns across three generations exposed to violence, yet notes that family storytelling influences phenotypic resilience (Mulligan et al., 2025). In Rwanda, community storytelling has been integrated into trauma interventions precisely because it appears to mitigate transgenerational biological marks (H3Africa Consortium). These African cases extend global epigenetic discourse, which has historically centred Holocaust and Dutch Hunger Winter cohorts, by demonstrating that postcolonial war trauma—particularly famine deployed as weapon—produces comparable yet culturally mediated signatures. The Igbo emphasis on oral performance as healing thus contributes to a decolonised epigenetics, one that respects local explanatory models over imported PTSD frameworks.

CONCLUSION

This study has demonstrated that intergenerational storytelling in post Nigerian-Biafran War Igbo communities represents a profound cultural transformation historical trauma into adaptive resilience across generations. Through a historical qualitative inquiry grounded in narrative analysis of 250 participants from three generational cohorts in Anambra, Enugu, and Imo States, the research has illuminated how families navigate the delicate balance between strategic silence and performative disclosure. The findings reveal storytelling not as passive transmission of pain but as an active, dialectical process: silence protects while disclosure empowers; victimhood is acknowledged yet consistently reframed into narratives of endurance, ingenuity, and collective defiance. These patterns richly affirm and extend the integrated theoretical framework of Alexander's cultural trauma (2004), Hirsch's postmemory (2008), and interpretive models of epigenetic adaptation within gene-culture coevolution.

The persistence of strategic silence, documented most strongly among first-generation survivors, emerges not as repression but as a culturally attuned survival strategy forged in the crucible of war, famine, and post-war marginalisation. This silence coexists with evolving narrative practices that shift across generations from factual, restrained accounts to morally instructive second-generation retellings and politically charged, performative third-generation interpretations. Linguistic and literary devices serve as powerful scaffolds that render trauma coherent and shareable. Participants consistently pivoted toward resilience, highlighting communal solidarity, women's post-war entrepreneurship, and an embodied sense of inherited vigilance that many described as "feeling the war in my bones." These subjective perceptions of intergenerational effects, while not biologically measured in this study, point toward meaningful pathways through which cultural narratives may interact with stress-response systems and adaptive capacities.

By privileging Igbo voices and oral traditions, this research addresses a critical gap at the intersection of cultural anthropology, oral history, linguistics, literary studies, and epigenetics. It demonstrates that cultural trauma in the Igbo context remains an ongoing, contested process (Alexander, 2004), mediated through postmemory that is deeply imaginative and politically potent (Hirsch, 2008). Unlike many Western trauma models that pathologise silence or prioritise individual disclosure, the Igbo experience reveals culturally embedded mechanisms that convert inherited wounds into sources of strength. This movement "from silence to resilience" challenges deficit-oriented portrayals of the war's legacies and enriches global understandings of how postcolonial societies process collective violence.

The study's contributions are multifaceted. Theoretically, it advances postmemory scholarship by foregrounding African oral cosmologies, where ancestry, proverb, and performance operate as primary vehicles of inheritance. It extends gene-culture coevolution perspectives by positioning storytelling as "epigenetic scaffolding", a cultural practice capable of modulating the expression of trauma legacies without claiming direct causation. For Genetics and Molecular Research, the work provides essential sociocultural context that can sharpen the interpretation of future molecular or epigenomic studies involving Nigerian or African populations. It underscores the need for interdisciplinary approaches that respect local explanatory models rather than imposing external frameworks.

Practically, the findings carry significant implications for mental health, education, and peacebuilding in Southeast Nigeria. Culturally grounded interventions that integrate rather than disrupt traditional storytelling practices through community dialogues, school curricula that honour oral histories, and family-based resilience programs hold greater promise than imported PTSD models. The emphasis on women's roles and third-generation agency suggests pathways for youth empowerment and gender-sensitive post-conflict healing. By returning findings to participating communities through planned dissemination workshops in accessible Igbo-language formats, the research upholds ethical commitments to communal ownership of knowledge.

Comparatively, these insights resonate with parallel experiences across Africa and beyond. The strategic use of silence and reframing mirrors dynamics in Rwandan genocide survivor communities, Syrian refugee families, and African American intergenerational trauma narratives. In each case, cultural storytelling emerges as a mediator that can either perpetuate vulnerability or foster adaptive resilience. The Igbo case is distinctive, however, in its deep embedding within longstanding oral traditions and its navigation of a national context that continues to suppress public acknowledgment of postwar suffering. This tension between private memory and public forgetting sustains what Osisioma et al (2025) describes as "enduring separatism," yet also fuels remarkable cultural vitality.

Future research should build directly on this foundation. Mixed-methods studies combining qualitative narrative analysis with targeted epigenetic profiling (e.g., examining methylation patterns in stress-related genes among storytelling cohorts) would be particularly valuable. Comparative work across other Nigerian ethnic groups or African post-conflict societies could illuminate both universal and culture-specific dimensions of intergenerational adaptation. Longitudinal designs tracking how digital media and social change reshape these oral traditions among younger generations would also enrich the literature.

In conclusion, the stories documented in this research affirm the extraordinary resilience of Igbo communities. More than five decades after the Nigerian-Biafran War, families continue to weave pain, pride, endurance, and hope into narratives that sustain identity and foster adaptation. These intergenerational acts of storytelling represent far more than historical remembrance; they constitute a living cultural inheritance that shapes how subsequent generations perceive themselves, respond to adversity, and imagine collective futures. In an era when many African societies continue to grapple with the legacies of conflict, colonialism, and marginalisation, the Igbo example offers both inspiration and scholarly provocation: that the stories we choose to tell or to withhold may hold profound power not only over cultural memory but also over the biological and psychological trajectories of those yet to come.

By listening attentively to these voices, this study contributes to a more holistic, decolonised understanding of trauma and resilience one that honours the humanities' depth while remaining open to dialogue with the life sciences. Ultimately, the journey from silence to resilience in postwar Igbo communities reminds us that healing is never solely individual or biological; it is profoundly cultural, relational, and intergenerational.

REFERENCES

1. Adebayo, S. (2021). Writing about the dead in the present tense: *Half of a Yellow Sun* as a work of postmemory. *Research in African Literatures, 52*(1), 6–25. https://doi.org/10.2979/reseafrilite.52.1.06
2. Alexander, J. C. (2004). Toward a theory of cultural trauma. In J. C. Alexander, R. Eyerman, B. Giesen, N. J. Smelser, & P. Sztompka (Eds.), *Cultural trauma and collective identity* (pp. 1–30). University of California Press.
3. Ani, U.S, Ugbudian, L.I., Ezeonwuka, I.N., Ezedinachi, I.E., Uwakwe, C.C., Eke, J.U., Ajaegbo, I.K. "Unheard Minority Opinions in the Ngerian-Biafra War, 1967-1970" *International Journal on Minority and Group Rights,* Brill.com/ijgr DOI:10.1163/15718115-BAJA10126, ISSN:1385-4879 (Print) 1571-8115 (Online)
4. Baldwin, C. (2025). *Children and the Nigerian Civil War: Looking beyond the humanitarian gaze*. University of Exeter.
5. Cassano, D. (2018). *The Biafra War: Cultural memory in two novels of Chimamanda Ngozi Adichie and Chinelo Okparanta* (Master's thesis, Dalarna University). DiVA Portal. https://urn.kb.se/resolve?urn=urn:nbn:se:du-28167
6. Heerten, L. (2017). *The Biafran War and postcolonial humanitarianism: Spectacles of suffering*. Cambridge University Press.
7. Heerten, L., & Moses, A. D. (2014). The Nigeria–Biafra war: Postcolonial conflict and the question of genocide. *Journal of Genocide Research, 16*(2–3), 169–203. https://doi.org/10.1080/14623528.2014.936700
8. Hughes, S. P. F. (1969). Malnutrition in the field: Nigerian Civil War 1968–9. *The British Medical Journal, 2*(5654), 436–438.
9. Hult, M., Tornhammar, P., Ueda, P., Chima, C., Edstedt Bonamy, A.-K., Ozumba, B., & Norman, M. (2010). Hypertension, diabetes and overweight: Looming legacies of the Biafran famine. *PLoS ONE, 5*(10), e13582. https://doi.org/10.1371/journal.pone.0013582
10. Ifeanyi, O. M. (2026). Generational perspectives on the Biafra emancipation movement: Analyzing attitudes, beliefs, and activism across political generations in Nigeria. *International Journal of Adolescence and Youth, 31*(1), 2607228. https://doi.org/10.1080/02673843.2025.2607228
11. Ingram, L., De Jesus, A. D., & Nam, E. (2026). Intergenerational trauma and resilience in African American families: A dimensional conceptual analysis of dyads and triads. *Genealogy, 10*(1), 15. https://doi.org/10.3390/genealogy10010015
12. Intergenerational transmission of the strong Black woman narrative. *Family Process*. https://doi.org/10.1111/famp.70008
13. Kim, A.W., Said Mohamed, R., Norris, S.A., Richter, L.M. and Kuzawa, C.W. (2023), Psychological legacies of intergenerational trauma under South African apartheid: Prenatal stress predicts greater vulnerability to the psychological impacts of future stress exposure during late adolescence and early adulthood in Soweto, South Africa. J Child Psychol Psychiatr, 64: 110-124. https://doi.org/10.1111/jcpp.13672
14. Korieh, C. J. (2012). *The Nigeria-Biafra War: Genocide and the politics of memory*. Cambria Press.
15. Kulturiskvlevebi. (n.d.). *Kulturiskvlevebi*. Retrieved April 15, 2026, from http://kulturiskvlevebi.weebly.com/Lee, A. T., et al. (2025). Examining the
16. Lehrner, A., & Yehuda, R. (2018). Cultural trauma and epigenetic inheritance. *Development and Psychopathology, 30*(5), 1763–1777. https://doi.org/10.1017/S0954579418001153
17. Madueke, O. (2025). Reimagining Biafra: Between historical memory and political reality. *The Round Table, 114*(6), 797–817. https://doi.org/10.1080/00358533.2025.2559888

18. Marianne Hirsch. (2008). The generation of postmemory. *Poetics Today, 29*(1), 103–128. https://doi.org/10.1215/03335372-2007-019.
19. Mulligan, C. J., Quinn, E. B., Hamadmad, D., Dutton, C. L., Nevell, L., Binder, A. M., Panter-Brick, C., & Dajani, R. (2025). Epigenetic signatures of intergenerational exposure to violence in three generations of Syrian refugees. *Scientific Reports, 15*, 5945. https://doi.org/10.1038/s41598-025-89818 de St. Jorre, J. (1972). *The Nigerian Civil War*. Hodder and Stoughton.
20. Okwuosa, L., Nwaoga, C. T., & Uroko, F. (2021). The post-war era in Nigeria and the resilience of Igbo communal system. *JAMBA: Journal of Disaster Risk Studies, 13*(1), 867. https://doi.org/10.4102/jamba.v13i1.867
21. Onumonu, U. P., & Amaechi, C. V. (2025). An exploratory research on Oru-Igbo in the Biafran struggle during the Nigerian Civil War, 1967–1970. *African Identities, 1–21*. https://doi.org/10.1080/14725843.2025.2453109
22. Oren, G., Shoshani, A., Samra, N. N., Verbeke, W. J. M. I., Vrticka, P., Aisnberg-Shafran, D., & Ein-Dor, T. (2025). From trauma to resilience: Psychological and epigenetic adaptations in the third generation of Holocaust survivors. *Scientific Reports, 15*, Article 26193. https://doi.org/10.1038/s41598-025-12085-5
23. Osisioma, U. S., Jayeola, F. D., Okoroafor, O. I., Grace, B. C., Nwodo, M. O., Lawal, A., Obiukwu, C. R., & Nmaju, U. U. (2025). Collective trauma, identity fusion, and enduring separatism: Reexamining post-Biafran narratives in Nigeria. *TPM – Testing, Psychometrics, Methodology in Applied Psychology, 32*(S7). https://www.tpmap.org/article-view/?id=4232
24. Richerson, P. J., Boyd, R., & Henrich, J. (2010). Gene-culture coevolution in the age of genomics. *Proceedings of the National Academy of Sciences, 107*(Supplement 2), 8985–8992. https://doi.org/10.1073/pnas.0914631107
25. Tella, D. (2025). *Collective memory of the Nigerian Civil War: A study of selected literary texts* (Master's thesis, University of Groningen). https://gmwpublic.studenttheses.ub.rug.nl/4569/1/Full-Thesis.-.pdf
26. Uche, C. (2008). Oil, British interests and the Nigerian Civil War. *The Journal of African History, 49*(1), 111–135.
27. Uwakwe, U. D., & Adaeze, R.-O. (2021). The aesthetics of orality in Ojukwu's Biafra War speeches. *Chukwuemeka Odumegwu Ojukwu Journal of Folklore and Cultural Studies, 1*(1). https://journals.ezenwaohaetorc.org/index.php/COOUJOFOCUS/article/view/1939
28. Yehuda, R., Daskalakis, N. P., Bierer, L. M., Bader, H. N., Klengel, T., Holsboer, F., & Binder, E. B. (2016). Holocaust exposure induced intergenerational effects on FKBP5 methylation. *Biological Psychiatry, 80*(5), 372–380. https://doi.org/10.1016/j.biopsych.2015.08.005.