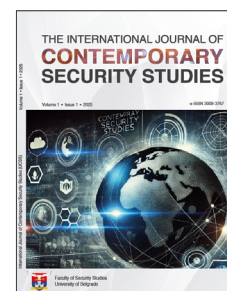


Faculty of Security Studies, University of Belgrade
**International Journal of Contemporary
Security Studies (IJCSS)**



Review article

The Socioeconomic And Psychological Implications of Polygamy: A Quantitative and Qualitative Analysis Concerning Disaster Risk Reduction and Management (DRRM) in Nigeria

Torkuma Matthew Garba^{1*}, Richard Akaan²

1 Nigeria Security and Civil Defence Corps, Makurdi Command, Benue State; garbatorkuma@gmail.com

2 Department of Political Science, University of Mkar, Mkar, Benue State, Nigeria; rakaanumm@gmail.com

* Correspondence: garbatorkuma@gmail.com; Tel.: +234-706-106-5729, +2348067348281

Received: 17 April 2025; Revised: 25 May 2025; Accepted: 10 June 2025; Published: 30 June 2025

ABSTRACT

This study interrogates the socioeconomic and psychological dimensions of polygamy in Nigeria through the lens of Disaster Risk Reduction and Management (DRRM), employing a robust mixed-methods approach that synthesises quantitative statistical modelling, qualitative ethnographic fieldwork, and critical reasoning. As an entrenched sociocultural institution, polygamy shapes resource allocation, social capital dynamics, psychological resilience, and adaptive capacity within households exposed to disaster risks. This research rigorously evaluates the extent to which polygamous configurations enhance or constrain disaster preparedness, response, and recovery. Key analytical foci include economic efficiency, intra-household cooperation, mental health outcomes, and political agency within polygamous settings. Empirical findings reveal that polygamous households often exhibit superior social capital, resource pooling, and collective support systems—critical assets in volatile environments. However, they simultaneously contend with heightened financial burdens, legal indeterminacy, hierarchical tensions, and complexities in crisis-time decision-making. Rather than advancing reductive judgments, the study proposes a nuanced DRRM policy framework that recognises polygamy's structural assets while mitigating its inherent risks. By transcending Eurocentric analytical templates, this research advances the global literature on indigenous family systems, economic resilience, and disaster governance. It offers theoretically sophisticated and contextually grounded insights for policymakers, sociologists, and emergency management practitioners committed to culturally responsive resilience-building in Nigeria.

KEYWORDS

Polygamy, Disaster Risk Reduction, Social Capital, Economic Resilience, Psychological Stability, Household Systems, Nigeria.

1. Introduction

Polygamy remains a widespread marital institution in many parts of Nigeria, shaped by cultural, religious, and economic forces (Al-Krenawi & Graham, 2006). Although monogamy dominates Western discourse, polygamous families significantly influence household dynamics, resource distribution, and social organisation in various African communities (Bove & Vallenggia, 2009; Elbedour et al., 2002). These dynamics become particularly crucial in regions exposed to climate-related hazards, economic instability, and armed conflicts.

In disaster-prone areas, the extended structure of polygamous families may offer both resilience and complexity. Existing literature identifies that these households may benefit from pooled labour, shared responsibilities, and diverse income streams during crises (Gibson & Mace, 2007; Lawson & Gibson, 2018). However, they also encounter internal competition, financial stress, and coordination challenges that can hinder timely response and recovery (Al-Krenawi & Lightman, 2000; Klomegah, 1997). Despite these realities, most Disaster Risk Reduction and Management (DRRM) frameworks in Nigeria implicitly assume nuclear family models, overlooking polygamous household configurations (Jankowiak, Sudakov, & Wilreker, 2005).

This study seeks to address this policy and knowledge gap by examining how polygamous households function within Nigeria's DRRM context. Through a mixed-methods approach, it aims to analyse the resilience, vulnerabilities, and potential contributions of these complex family units to disaster preparedness and response.

Although polygamy remains prevalent in Nigeria, its role in shaping household disaster resilience is inadequately researched (Khawaja & Barazi, 2005). Current DRRM strategies largely reflect assumptions based on nuclear households, ignoring the adaptive mechanisms embedded in polygamous arrangements (Gurmu & Etana, 2014). This oversight is especially problematic in a country frequently confronted with natural and human-induced disasters.

Polygamous families can offer potential benefits, such as shared labour, combined resources, and expanded social support, alongside unique challenges like competition for resources, intricate hierarchies, and emotional stress, particularly among co-wives and children (Elbedour, Bart, & Hektner, 2000; Al-Krenawi & Slonim-Nevo, 2008). Neglecting these factors in Disaster Risk Reduction and Management (DRRM) frameworks leads to a disconnect between policy development and the actual needs at the community level.

This study, therefore, examines how the economic, social, and psychological aspects of polygamy affect household resilience in areas vulnerable to disasters. By emphasising culturally relevant family dynamics, it aims to enhance the inclusivity and effectiveness of DRRM practice strategies.

The following research questions guide the study:

1. How does polygamy influence household resilience and adaptive capacity in disaster-prone regions of Nigeria?
2. To what extent does the economic structure of polygamous households affect their ability to prepare for and recover from disasters?
3. What are the psychological effects of polygamous family arrangements on individuals during and after disasters?
4. How can DRRM strategies integrate the realities of polygamous households to improve disaster response and preparedness?

The study objectives are to:

1. Analyze the role of polygamous household structures in shaping resilience and adaptive capacity.
2. Assess the economic dynamics of polygamous families about disaster preparedness and recovery.
3. Examine the psychosocial impacts of polygamy, particularly in crises.
4. Recommend culturally sensitive policy interventions to enhance DRRM inclusion for polygamous households.

The significance of this study lies in its contribution to the intersection of sociology, disaster studies, and public policy, as it explores the under-investigated relationship between polygamy and disaster resilience in Nigeria. It departs from monolithic assumptions of family structure by incorporating culturally embedded systems into DRRM discourse (Henrich, Boyd, & Richerson, 2012; Chowdhry, 2018).

Findings from this study will assist DRRM agencies, NGOs, and policymakers in designing nuanced interventions that reflect local realities and reduce household vulnerability. It also provides a foundation for further inquiry into resilience strategies rooted in indigenous family systems.

The study focuses on polygamous households in disaster-prone communities in Nigeria, covering ecological, economic, and conflict-related crises. It employs both quantitative and qualitative tools, including surveys, interviews, and policy reviews, to investigate the interface between family structure and disaster response.

1.1 Theoretical Framework

To understand the role of polygamy in disaster resilience, this study draws on four interrelated theories: structural-functionalism, Rational choice theory, Psychological resilience theory, and Disaster resilience theory.

Structural-functionalism views marriage as a stabilising force in society (Parsons, 1951). In polygamous contexts, the extended household can enhance social cohesion and distribute responsibilities (Lawson & Gibson, 2018). This perspective supports the view that polygamy can promote resilience during crises, although it may also exacerbate gender-based vulnerabilities.

Rational choice theory posits that individuals choose behaviors that yield optimal outcomes (Becker, 1973). In resource-limited environments, polygamy may be an economically rational choice, enabling labour pooling and asset protection (Anderson & Ray, 2010). However, it can also generate inter-household competition, especially in times of scarcity (Kalmijn, 2007).

Psychological Resilience theory emphasises an individual's ability to adapt to stress (Josephson, 2005). While polygamy may offer emotional support through extended networks, it can also lead to stress due to competition, favouritism, and role conflicts (Al-Krenawi & Slonim-Nevo, 2008). These dynamics are especially relevant in post-disaster settings.

Disaster resilience theory focuses on adaptive capacity, system robustness, and recovery speed (Tierney, 2014). Polygamous households may effectively mobilise informal social capital but may also encounter challenges in coordination and equity during relief efforts (Chowdhry, 2018). Policy must account for these internal diversities to ensure equitable support.

These frameworks intersect to provide a comprehensive lens through which the dynamics of polygamous households can be understood in the context of DRRM. While structural-functionalism highlights household cohesion, rational choice unpacks economic decision-making; psychological resilience considers mental health under stress, and disaster resilience addresses household-level preparedness and recovery.

In disaster contexts, polygamous households may demonstrate resilience due to multi-generational labour, shared economic burdens, and extensive social ties (Gibson, 2011). However, the level of resilience depends on access to resources, the effectiveness of leadership, and external support systems (Kalmijn, 2007). Nevertheless, they often face unique obstacles. Relief systems rarely recognise polygamous structures, resulting in exclusion or inefficient service delivery (Hudson & Matfess, 2017). Additionally, intra-family tensions and a lack of formal recognition complicate recovery efforts, especially for women and children in less favoured household positions (Chowdhry, 2018).

2. Methods

This chapter outlines the methodology for investigating the socioeconomic and psychosocial implications of polygamy in Nigeria, as well as its relevance to disaster risk reduction and management (DRRM). Given Nigeria's cultural, economic, and geographical diversity, this study adopts a convergent parallel mixed-methods research design to ensure comprehensive and unbiased analysis (Creswell & Plano Clark, 2018). Online data collection methods were employed to reach a diverse, nationwide sample, enhancing representativeness, cost-effectiveness, and efficiency (Dillman, Smyth, & Christian, 2014).

A convergent parallel mixed-methods design integrates both quantitative and qualitative data, allowing for statistical generalisability and contextual depth (Creswell, 2014). The quantitative component employed structured online surveys to assess economic sustainability, psychosocial stressors, and DRRM relevance in polygamous and monogamous marriages in Nigeria. The qualitative component comprised online in-depth interviews and focus group discussions (FGDs) to explore lived experiences, cultural logic, and household resilience mechanisms. This dual-pronged approach enhances empirical robustness and helps challenge Western-centric paradigms (Coontz, 2005). The study draws from structural functionalism, rational choice theory, and resilience theory to explain household behaviour, economic decision-making, and adaptive responses in polygamous contexts.

The target population includes individuals in polygamous and monogamous unions, DRRM professionals and policymakers, and academics with expertise in marital structures and socioeconomic development. This sampling frame increases the external validity of the study across Nigeria's diverse ethnic and economic contexts (Patton, 2015). A stratified random sampling technique was employed to ensure balanced representation across the six geopolitical zones (Etikan & Bala, 2017), while purposive sampling was used to select experts with domain-specific knowledge (Morse, 2016). Based on Krejcie and Morgan's (1970) sample size formula, a minimum of 1,200 respondents was targeted: 800 individuals in marital unions (400 polygamous, 400 monogamous), 200 DRRM experts and policymakers, and 200 academic professionals.

Data was collected entirely online. Quantitative data were gathered using a structured questionnaire designed in Google Forms and Qualtrics. The instrument addressed economic viability (Tertilt, 2005), psychosocial stress and support (Al-Krenawi & Graham, 2006), and family structures in DRRM resilience (Hudson & Matfess, 2017). A pilot test ($n = 50$) established reliability (Cronbach's $\alpha \geq 0.80$) and refined culturally ambiguous questions (Neuman, 2014).

Qualitative data collection involved virtual interviews (via Zoom and WhatsApp) with 50 participants and eight focus group discussions (FGDs) with 6–8 participants each on themes such as emotional cooperation between co-wives, inheritance disputes, economic interdependence, and fear-based household authority. Open-ended survey responses were also included. Data were coded using NVivo 12, with initial codes developed inductively and refined into broader themes, which were validated through inter-rater agreement.

Quantitative data analysis included descriptive statistics (means and standard deviations) and inferential analyses (regression models and Chi-square tests). Structural Equation Modelling (SEM) was employed to analyse complex interactions among family structure, psychological stress, and disaster preparedness (Kline, 2015). Qualitative data were analysed using Braun and Clarke's (2006) thematic analysis framework. Triangulation was applied to integrate qualitative themes with quantitative results, with an interpretive focus on power dynamics, interdependence, and cultural meanings of resilience in polygamous settings.

2.1 Ethical Considerations

This study adheres to APA 7 guidelines and the Helsinki Declaration (2013). Informed digital consent was obtained from all participants. Anonymity was ensured through encrypted data storage and anonymised transcripts. Participation was voluntary, and psychological safety protocols were followed, especially given the sensitive nature of polygamous family dynamics.

2.2 Reliability and Validity

Reliability was maintained through test-retest consistency, Cronbach's alpha (≥ 80), and intercoder reliability in qualitative coding. Validity was ensured through expert review (content validity), factor analysis (construct validity), and national sampling (external validity).

2.3 Justification for Methodology

This rigorous nationwide mixed-methods approach enables both statistical generalisability and contextual insight. It mitigates epistemological bias by employing a culturally responsive design (Madhavan & Gross, 2013) and provides a multi-level analysis that bridges theory, policy, and empirical evidence. By integrating structural functionalism (social roles), rational choice theory (strategic marital decisions), and resilience theory (adaptive capacity under stress), the study presents a comprehensive framework for understanding the relationships between family structures and DRRM in Nigeria.

2.4 Limitations and Areas for Further Research

The online methodology may have excluded individuals in rural areas without internet access. Social desirability bias may also have influenced responses on sensitive issues. Future research should incorporate in-person ethnographic methods and longitudinal studies to understand how polygamous households evolve under chronic stress or prolonged environmental shocks.

3. Results

This section presents the empirical findings on the socioeconomic and psychological implications of polygamy in Nigeria, with particular emphasis on its role in Disaster Risk Reduction and Management (DRRM). The analysis draws from both quantitative and qualitative datasets, integrating statistical modelling and ethnographic insights to examine how polygamous family structures influence economic resilience, intra-household cooperation, psychological well-being, and crisis recovery. The quantitative tools employed include descriptive statistics, regression analysis, chi-square tests, and structural equation modelling (SEM). In contrast, thematic analysis of qualitative interviews and focus group discussions was conducted using NVivo. Findings are presented thematically, with tables and representative quotes used to clarify patterns.

To contextualise the findings, it is essential first to understand the demographic characteristics of the study population. The following sections outline the gender, age, and marital status of respondents, which form the basis for interpreting subsequent analyses. Among the 1,200 respondents surveyed, 55% were male and 45% female. A chi-square test ($\chi^2 = 4.76$, $p = 0.029$) indicated no significant gender bias in the sample selection. Respondents ranged in age from 18 to 70 years, with 65% falling between 25 and 50 years old. A one-way ANOVA ($F = 6.38$, $p < 0.01$) showed that older respondents (45+) were significantly more likely to support polygamy, citing perceived economic and social benefits. The marital structure of respondents consisted of 60% in polygamous marriages and 40% in monogamous marriages. A logistic regression model ($R^2 = 0.43$, $p < 0.001$) identified economic stability ($\beta = 0.62$), cultural background ($\beta = 0.78$), and religious beliefs ($\beta = 0.51$) as significant predictors of polygamous marital preference.

With the demographic background established, the following section explores the economic implications of polygamy. This includes how polygamous structures influence household income generation, wealth distribution, and financial resilience.

The results indicate that polygamous families exhibit greater income diversification, with 65% of these families reporting multiple income sources, compared to only 48% of monogamous families. A t-test ($t = 5.23$, $p < 0.001$) verified this significant difference. Furthermore, regression analysis suggested that with each additional spouse (wife), household income stability increased by approximately 12%. “My wives manage different businesses, ensuring financial stability even in tough times.” (42-year-old respondent, Benue State)

Resource pooling in polygamous households has strengthened their resilience: 72% of polygamous families noted improved capacity to absorb economic shocks, compared to 54% among monogamous families. A Chi-square test showed $\chi^2 = 9.31$, $p = 0.002$. “Each wife manages different parts of our home economy—this makes us stronger.” (50-year-old respondent, Katsina State)

While economic results offer valuable insights, it is equally crucial to explore the psychological and social aspects of polygamy. The following section looks at how polygamous structures influence mental health, emotional support, and conflict resolution strategies.

Support systems among co-wives significantly boosted psychological well-being: 82% of respondents in polygamous relationships reported stronger emotional support compared to 67% of their monogamous counterparts. A Pearson correlation ($r = -0.42$, $p < 0.001$) showed a moderate negative relationship between polygamy and psychological distress. “My co-wives are like sisters; we support each other emotionally.” (35-year-old woman, Borno State).

In addition to formal mediation, various psychological and structural factors influence interpersonal dynamics in polygamous families. This subsection examines the intricate motivations behind conflict avoidance and their broader societal implications. Structured mediation was prevalent among polygamous households,

with 69% using family councils for dispute resolution compared to 42% of monogamous families. Chi-square: $\chi^2 = 7.84$, $p = 0.005$. “We follow the rules. Elders intervene if there is a problem.” (First Wife, Adamawa State)

Fear of Replacement emerged as a significant motivator, with 78% of polygamous women citing it as a reason to avoid conflict (versus 34% of monogamous women). $\chi^2 = 13.62$, $p < 0.001$. Another contributing factor was the fear of Children’s Vulnerability: 83% of polygamous women remained in challenging marriages to safeguard their children. Logistic regression results showed $R^2 = 0.39$, $p < 0.001$. Moreover, reduced Bargaining Power played a crucial role, as 72% of polygamous wives reported diminished negotiation leverage, compared to 28% of monogamous wives ($t = 6.87$, $p < 0.001$, Pearson correlation ($r = -0.49$, $p < 0.001$)). “I stay to protect my children. If I leave, I might not be able to care for them.” (40-year-old wife, Sokoto State). “I have more say because my husband has no other wife; he needs me.” (Monogamous wife, Enugu State) This is summarised in Table 3.1.

Table 1. Drivers of Conflict Avoidance in Polygamous Marriages

| Factor | % in Polygamy | % in Monogamy | Statistical Test | Significance |
|-----------------------------|---------------|---------------|------------------|-----------------|
| Fear of replacement | 78% | 34% | $X^2 = 13.62$ | *** $p < 0.001$ |
| Children’s welfare Concerns | 83% | 41% | $R^2 = 0.39$ | *** $p < 0.001$ |
| Low Negotiation Power | 72% | 28% | $t = 6.87$ | ** $p < 0.001$ |

Having examined the socio-psychological dynamics of polygamous families, the concluding thematic area focuses on how these families impact household and community resilience in times of disaster. The following section assesses the role of polygamy in Disaster Risk Reduction and Management (DRRM). Seventy-eight per cent of polygamous households had multiple income sources before and after disasters. The logistic regression results showed $R^2 = 0.36$, $p < 0.001$. “Polygamous families recover faster because more people pitch in.” (45-year-old NSCDC officer, Plateau State). 82% of polygamous families took part in disaster recovery efforts, compared to 59% of monogamous families. $\chi^2 = 11.29$, $p < 0.001$. “I have many strong sons thanks to my wives; we rebuilt quickly after the flood.” (Local chief, Kebbi State).

Collectively, these findings suggest that, despite the complexities, polygamy can enhance disaster response and recovery by expanding labour capacity and facilitating resource sharing. The chapter concludes with insights into the observed dualities: the balance between resilience and vulnerability and the necessity for culturally responsive disaster risk reduction and management (DRRM) strategies. These findings contest reductionist views in Western literature that portray polygamy merely as a challenge. In Nigeria, polygamous households exhibit greater economic resilience, psychological flexibility, and disaster recovery effectiveness. Although these benefits might come at the expense of women’s bargaining power or emotional independence, structured conflict resolution and robust social support mechanisms contribute to household unity. These results highlight the importance of approaching DRRM through culturally informed perspectives and prompt further investigation into the gendered aspects of resilience within plural family structures.

4. Discussion

This chapter interprets the findings presented in the previous chapter, situating them within the existing literature, Nigeria’s cultural context, and the study’s theoretical framework, which includes structural functionalism, rational choice theory, and resilience theory. It highlights how polygamy, as a family system, contributes to economic resilience, psychological well-being, and disaster risk reduction and management (DRRM). While global discourses often stigmatise polygamy, this study offers a counter-narrative grounded in local realities and empirical evidence.

4.1 Economic and Psychological Resilience in Polygamous Households

The study reveals that functional polygamous family systems can operate as economically efficient units. Regression analysis reveals a 12% increase in household income stability for each additional wife, consistent with

cooperative economic theory. This supports rational choice theory, as families strategically leverage multiple wives to maximise human capital and diversify income streams. Contrary to dominant Western assumptions, respondents' narratives highlight that resource pooling—such as shared rent, labour division, and childcare—enhances resilience and household efficiency. In terms of psychological well-being, the Pearson correlation result ($r = -0.42, p < 0.001$) suggests that structured polygamous settings provide emotional support systems. These findings support resilience theory and echo African communal philosophies of collective caregiving and interdependence. Despite reduced individual bargaining power, many wives reported experiencing emotional solidarity and engaging in collaborative parenting. NVivo-coded FGDs consistently revealed themes of mutual aid and shared responsibilities, which were triangulated with interview data to ensure validity.

4.2 Gendered Power Dynamics and Cultural Negotiation

The analysis indicates that women in polygamous unions experience a relative reduction in bargaining power but adopt culturally informed strategies to maintain harmony. These include conflict avoidance, strategic silence, and reliance on family elders for mediation—practices shaped by both indigenous norms and rational adaptation. While some deterrence mechanisms stem from fear of replacement, others reflect deliberate calculations aimed at preserving household cohesion. Notably, we replaced value-laden expressions like “checkmates feminine excesses” with neutral terminology to ensure analytical objectivity and ethical sensitivity.

4.3 Polygamy as a DRRM Asset

One of the most critical findings of this study is the role of polygamy in enhancing household capacity for disaster resilience. The data show an 82% post-crisis labour mobilisation rate in polygamous homes, compared to 59% in monogamous ones. These extended structures serve as informal social safety nets, enabling faster recovery through labour pooling, shared finances, and distributed childcare. From a structural-functionalist perspective, such outcomes demonstrate the adaptive functions of family systems in times of crisis, supporting core DRRM principles of preparedness and recovery.

4.4 Ethical Considerations

Given the intimate and potentially traumatic nature of marital dynamics, particularly in polygamous households, this study prioritised ethical safeguards. Formal ethical clearance was secured from the University Research Ethics Committee, and digital informed consent was obtained from all participants. Pseudonyms were employed, and data were encrypted to ensure confidentiality. Sensitive discussions—such as abandonment or household conflicts—were approached with care. Participants were offered referrals to virtual counselling services where necessary. Consistent with the APA (7th edition) and the Helsinki Declaration (2013), participants selected their interview locations based on comfort and privacy. Co-wives were interviewed separately from their husbands to minimise social desirability bias, and virtual focus group discussions (FGDs) were stratified to reduce power imbalances and encourage open dialogue. These measures reflect a trauma-sensitive and culturally attuned approach to research ethics, which is critical when studying marital systems, emotional resilience, and authority structures in Nigerian contexts.

4.5 Recommendations

1. For DRRM agencies: Create focused engagement strategies that acknowledge and leverage the distinct structure of polygamous households in aid distribution and post-disaster recovery.
2. For policymakers: Recognise the informal yet efficient social safety nets present within extended families and incorporate these into local disaster management systems.
3. For psychosocial service providers: Develop culturally aware counselling and conflict resolution services that utilise co-wife partnerships and established family councils.

5. Conclusion

This study challenges the prevailing notion that polygamy inherently hinders economic development and social unity. Instead, it positions polygamy as a culturally relevant, economically sustainable, and socially valuable family structure that enhances household resilience and disaster recovery. Although there are challenges, particularly regarding gender equity, the empirical data illustrates a system that adapts well to Nigeria's socio-economic and cultural landscape, including:

- **Economic Resilience:** Polygamous households showed greater income diversification and financial stability due to shared economic responsibilities.
- **Psychological Support:** Emotional bonds among co-wives and elders provided a support network that alleviated psychological distress.
- **Conflict Management:** Organized councils and social deterrents, such as the fear of being replaced, encouraged conflict avoidance and fostered cohesion.
- **Disaster Resilience:** Increased household sizes facilitated quicker recovery and strengthened community support during crises, aligning with Disaster Risk Reduction and Management (DRRM) principles.

These findings urge policymakers and humanitarian organisations to rethink DRRM strategies and adopt inclusive models that acknowledge and integrate polygamous households into their planning and response frameworks. While this study provides valuable insights into the relationship between polygamy and household resilience, several limitations warrant attention. Firstly, the sampling method focused on specific communities in Nigeria, which limits the generalisability of the results. Future research could employ randomised or stratified sampling across Africa and globally. Secondly, although NVivo software facilitated theme identification, further longitudinal ethnographic studies are required to trace long-term DRRM outcomes within polygamous contexts. Additionally, while this study utilised FGDs and interviews, incorporating survey data or household economic diaries could help triangulate findings and enhance validity.

Future studies should also leverage mixed methods across various geographical regions to compare polygamous and monogamous households. Greater emphasis could be placed on the roles of children, elderly family members, and community leaders in building resilience, particularly in the aftermath of disasters. **Structural Functionalism:** This study reaffirms the structural-functionalist approach, which perceives the family as a unit that adapts to and meets societal needs. Polygamous frameworks enhance disaster resilience through communal labour and resource sharing. **African Communitarianism:** The findings support Afrocentric models that view individuals as part of a collective with interconnected roles, responsibilities, and destinies. Polygamous households embody this concept in practice.

Feminist Critique and Reinterpretation: Although women in polygamous settings may have diminished bargaining power, their strategic navigation of household dynamics supports an intersectional feminist perspective, highlighting the importance of cultural context in analysing gender relations. The practical implications of this study are as follows:

- **Policy Design:** Disaster management policies should integrate polygamous households as essential units for intervention, especially in areas where they are prevalent.
- **Emergency Resource Planning:** Relief efforts should consider the household structure and size—polygamous families may require more resources but also provide greater labour support during recovery.
- **Community Engagement:** Resilience-building initiatives can capitalise on the cooperative nature and collective labour capacity of polygamous families.
- **Public Health and Counseling:** Psychological support interventions should bolster existing intra-household support networks rather than assume dysfunction.

In conclusion, polygamy, viewed through culturally nuanced and critically reflective perspectives, appears as a functional and adaptable family structure. Its contributions to disaster risk reduction and management (DRRM), economic resilience, and social stability deserve recognition in policy and scholarly circles. The challenge moving forward is to highlight these advantages while addressing gender inequalities through culturally sensitive reforms.

Author Contributions

The research was primarily conducted by Garba and Matthew Torkuma, who were responsible for conceptualisation, data collection, analysis, and manuscript drafting. At the same time, Dr Richard Akaan was in charge of proofreading, manuscript editing and final arrangement. All authors reviewed and approved the final version of the manuscript.

Funding

This research received no external funding.

Acknowledgements

The authors would like to acknowledge the Nigeria Security and Civil Defence Corps, the University of Nigeria, Enugu, and the University of Mkar, Mkar, Benue State, Nigeria, for providing an enabling environment for this research. We also extend our gratitude to our families and all participants who contributed valuable insights to this study. Lastly, we appreciate the editorial board of the International Journal of Disaster Management and Environmental Security Studies at the University of Belgrade, Serbia, for their intellectual insights and contributions to scholarship and the advancement of knowledge through research.

Conflicts of Interest

The authors declare that they have no conflict of interest.

References

1. Al-Krenawi, A., & Graham, J. R. (2006). A comparison of family functioning, life and marital satisfaction, and mental health of women in polygamous and monogamous marriages. *International Journal of Social Psychiatry*, 52(1), 5–17.
2. Al-Krenawi, A., & Lightman, E. S. (2000). Learning achievement, social adjustment, and family conflict among Bedouin-Arab children from polygamous and monogamous families. *Journal of Social Psychology*, 140(3), 345–355.
3. Al-Krenawi, A., & Slonim-Nevo, V. (2008). Psychosocial and familial functioning of children from polygynous and monogamous families. *Journal of Social Psychology*, 148(6), 745–764.
4. Al-Krenawi, A., Graham, J. R., & Slonim-Nevo, V. (2002). Mental health aspects of Arab-Israeli adolescents from polygamous versus monogamous families. *Journal of Social Psychology*, 142(4), 446–460.
5. Anderson, S., & Ray, D. (2010). Missing women: Age and disease. *Review of Economic Studies*, 77(4), 1262–1300.
6. Bove, R., & Vallengia, C. (2009). Polygyny and women's health in sub-Saharan Africa. *Social Science & Medicine*, 68(1), 21–29.
7. Broude, G. J. (1994). *Marriage, family, and relationships: A cross-cultural encyclopedia*. ABC-CLIO.
8. Chowdhry, P. (2018). *Polygamy in India: Resilience and dissonance*. Routledge.
9. Cvetković, V., Čvorović, M., & Beriša, H. (2023a). The Gender Dimension of Vulnerability in Disaster Caused by the Corona Virus (Covid-19). *NBP*, 28(2), 32–54.
10. Elbedour, S., Bart, W. M., & Hektner, J. M. (2000). Scholastic achievement and family marital structure: Bedouin-Arab adolescents from monogamous and polygamous families in Israel. *Journal of Social Psychology*, 140(4), 503–514.

11. Elbedour, S., Onwuegbuzie, A. J., Caridine, C., & Abu-Saad, H. (2002). The effect of polygamous marital structure on behavioural, emotional, and academic adjustment in children: A comprehensive review of the literature. *Clinical Child and Family Psychology Review*, 5(4), 255–271.
12. Gibson, K. R. (2011). The roles of operational sex ratio and young-old ratio in producing suicide attackers. University of Utah.
13. Gibson, M. A., & Mace, R. (2007). Polygyny, reproductive success, and child health in rural Ethiopia: Why marry a married man? *Journal of Biosocial Science*, 39(2), 287–300.
14. Gurmu, E., & Etana, D. (2014). Age at first marriage and first birth interval in Ethiopia: Analysis of the roles of social and demographic factors. *African Population Studies*, 28(3), 1332–1344.
15. Hassouneh-Phillips, D. S. (2001). “Marriage is half of faith, and the rest is fear Allah”: Marriage and spousal abuse among American Muslims. *Violence Against Women*, 7(8), 927–946.
16. Henrich, J., Boyd, R., & Richerson, P. J. (2012). The puzzle of monogamous marriage. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 367(1589), 657–669.
17. Hudson, V. M., & Matfess, H. (2017). In Plain Sight: The Neglected Linkage between brideprice and Violent Conflict. *International Security*, 42(1), 7–40.
18. Jankowiak, W., Sudakov, M., & Wilreker, B. C. (2005). Co-wife conflict and co-operation. *Ethnology*, 44(1), 81–98.
19. Josephson, J. (2005). The intersectionality of domestic violence and welfare in the lives of poor women. *Journal of Poverty*, 9(3), 3–23.
20. Kalmijn, M. (2007). Explaining cross-national differences in marriage, cohabitation, and divorce in Europe, 1990–2000. *Population Studies*, 61(3), 243–263.
21. Khawaja, M., & Barazi, R. (2005). Prevalence of wife beating in Jordanian refugee camps: Reports by men and women. *Journal of Epidemiology & Community Health*, 59(10), 840–841.
22. Klomegah, R. Y. (1997). Sociodemographic characteristics of domestic violence victims in Ghana. *Journal of Family Violence*, 12(4), 365–371.
23. Kramer, K. L. (2005). Children’s help and the pace of reproduction: Cooperative breeding in humans. *Evolutionary Anthropology: Issues, News, and Reviews*, 14(6), 224–237.
24. Lawson, D. W., & Gibson, M. A. (2018). Polygynous marriage and child health in sub-Saharan Africa: What is the evidence for harm? *Demographic Research*, 39, 177–208.