

Influence of Socio-Demographic Variables/Characteristics on Psychological Trauma Resilience among Humanitarian Aid Workers in North Eastern Nigeria

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Abstract

Against the backdrop of persistent insurgency in North-Eastern Nigeria driven by Boko Haram, humanitarian workers continue to operate in highly volatile and life-threatening environments, exposing them to significant psychological stressors. This study examined the influence of socio-demographic variables/characteristics on psychological trauma resilience among humanitarian aid workers in Nigeria. Guided by the Salutogenesis Theory of Resilience proposed by Aaron Antonovsky, the study adopted a survey research design involving humanitarian aid workers drawn from United Nations agencies and both international and local non-governmental organizations. Data were collected using the Connor-Davidson Resilience Scale (CD-RISC) which measures resilience from 251 participants who were drawn through the use of convenience sampling technique, while a one-way Analysis of Variance (ANOVA) was employed to test the stated hypothesis. Findings revealed that age does not have a statistically significant effect on psychological trauma resilience among humanitarian aid workers, $F(1, 585) = 0.008, p = .929$. This suggests that psychological resilience is relatively uniform across age groups, likely due to shared professional training, exposure to similar field conditions, and organizational support systems that enhance coping mechanisms irrespective of age. The study concludes that psychological resilience among humanitarian workers is a multifaceted construct influenced more by psychosocial and environmental factors than by demographic characteristics alone. It recommends that humanitarian organizations prioritize inclusive resilience-building interventions and that future research should explore other predictors such as emotional intelligence, personality traits, and social support systems to better understand resilience in high-risk occupational settings.

Keywords: Psychological trauma resilience, humanitarian aid worker, socio-demographic characteristic, age, insurgency

Introduction

Psychological trauma resilience has been a very challenging thing for humanitarian workers because of their experiences in North Eastern Nigeria because ever since Boko Haram known as Jama'atul Alhul Sunnah Lidda' wati wal Jihad, launched a bloody insurgency in 2009 in North-eastern Nigeria but later spread its atrocities to neighbouring Niger, Chad and Cameroon, prompting a military response in the region, one set of people that also bear the brunt of the gruesome attacks are the humanitarian aid workers who are often in the frontline trying to provide aid to people in need (Bello, 2022). These targeted attacks as well as torture and murder of aid workers has been a cause for worry to many aid workers in these affected locations. With the researcher being a survivor of one of these attacks himself, it is appalling how humanitarian workers manage life amidst crisis settings without developing symptoms of mental illness; or must have developed and get over it went on to even thrive in this type of work.

There is increased need for humanitarian aid workers globally and particularly in conflict affected areas like Nigeria. The fluid conflict environment entails more stress for humanitarian workers who are expected to deliver under harsh work condition and hostile environment (Hansen, 2007). Unmanaged stress among this select group (humanitarian aid workers) have been shown to negatively impact on their continued service delivery, retention in organizations, compromise of safety, and escalated health cost. Humanitarian aid workers face the difficult task of working in hostile, and often traumatic, environments and are highly susceptible to developing mental health issues. Among humanitarian aid workers in conflict areas, the ability to rationally and expressively cope with crises is a quality that is needed and often demanded by organizations they usually work for. Resilience is the ability to emotionally and mentally handle a crisis event or situation and return to the status quo before the crisis (de Terte & Stephens, 2014). It is obtainable when an individual engages in mental exercises, and actions that promote personal resources and protection from likely adverse effects of stressful events and other stressors within the environment. Individual resilience is vital to work performance and the personal contentment of humanitarian aid workers. However, adopting resilience plans may not be that easy for humanitarian aid workers in challenging situations where there is a frequent physical threat to life and family.

Support from family members had been associated with high levels of psychological well-being, resilience, and longevity (Zabo et al, 2023). As such, for both men and women, marriage has been associated with better health and longer life (Waite, 1995). Humanitarian aid workers face many psychological challenges as a result of working in high stress environments among dangerous and stress events such as the Boko-Haram, kidnapping, and banditry (Xanthakis, 2009). Many stressors that influence the mental health and well-being of humanitarian aid workers have been identified in previous studies (Gould, Watson, Price & Valliant, 2013). This study is concerned with identifying the specific process in terms of impact that socio-demographics may have on humanitarian aid workers' psychological resilience. A number of studies demonstrated that the concept of resilience encompasses a multiplicity of protective factors and adaptive processes (Smith, & Hayslip, 2012).

A study by Adebayo and Yusuf (2024) titled "Age Differences in Psychological Trauma Resilience among Humanitarian Workers in North-East Nigeria" adopted a cross-sectional survey design to examine how age influences resilience. The population comprised humanitarian aid workers operating in Borno and Yobe States, with a sample size of 230 selected through purposive sampling. Data were collected using the Connor-Davidson Resilience Scale (CD-RISC) and a trauma exposure checklist. Questionnaires were administered physically during field operations with the support of NGO coordinators. Data were analyzed using multiple regression analysis. The findings revealed that age significantly predicted resilience, with older workers demonstrating higher psychological resilience due to accumulated field experience and coping strategies, consistent with broader evidence that age is a key resilience factor in aid workers.

In another study, Musa et al. (2023) conducted research titled "Socio-demographic Predictors of Trauma Resilience among NGO Workers in Conflict Zones" using a descriptive survey design. The population consisted of NGO staff working in internally displaced persons (IDP) camps in Adamawa State, with a sample size of 180. Instruments included the Brief Resilience Scale and the PTSD Checklist. Data collection involved structured questionnaires administered in camp settings over a two-week period. Data were analyzed using ANOVA and regression analysis. The results indicated that age had a statistically significant influence on resilience, with middle-aged and older workers exhibiting stronger adaptive coping mechanisms than younger workers.

Similarly, Okonkwo and Eze (2025) carried out a study titled “Psychological Resilience and Age among Emergency Response Workers in Nigeria” using a correlational research design. The population included personnel from NEMA and Red Cross organizations, with a sample size of 160. Data were collected using the Resilience Scale for Adults (RSA) through self-administered questionnaires. The data collection process involved informed consent and anonymous participation. Analysis was conducted using Pearson Product Moment Correlation. Findings revealed a positive relationship between age and resilience, suggesting that older workers demonstrated better emotional stability and trauma management. Boateng and Asare (2023) conducted a study titled “Age and Coping Resilience among Humanitarian Volunteers in Ghana” using a cross-sectional design. The population consisted of NGO volunteers in Accra, with a sample size of 200. Instruments included the CD-RISC and a coping strategy inventory. Data were collected through both online and physical questionnaires distributed via NGOs. Analysis was carried out using multiple regression analysis. The results showed that age significantly influenced resilience, with older volunteers scoring higher due to enhanced coping skills developed over time.

Mensah (2024) did a study titled “Socio-demographic Determinants of Resilience among Disaster Relief Workers” and employed a descriptive survey design. The population comprised disaster response workers in Kumasi, with a sample size of 170. Data were collected using the Brief Resilience Scale through structured questionnaires. The procedure involved field visits and direct engagement with participants. Data were analyzed using ANOVA. Findings indicated that age differences were significant, with mid-aged workers demonstrating the highest resilience levels.

Owusu and Addo (2025) examined “Psychological Resilience in Humanitarian Contexts: The Role of Age and Experience” using a correlational design. The study population included humanitarian aid workers in Northern Ghana, with a sample size of 150. Instruments used were the Resilience Scale and demographic questionnaires. Data collection involved on-site distribution of questionnaires. Analysis was conducted using correlation and regression techniques. The results showed that age positively influenced resilience, mediated by work experience. Kamau (2023) conducted a study titled “Age Differences in Resilience among Humanitarian Aid Workers in Refugee Camps” using a cross-sectional design. The population consisted of NGO workers in Kakuma refugee camp, with a sample size of 220. Data were collected using the CD-RISC and trauma exposure scales through structured

interviews and questionnaires. Data were analyzed using regression analysis. The findings revealed that older workers demonstrated significantly higher resilience, attributed to adaptive coping strategies and prolonged exposure to field conditions.

Njoroge and Wambui (2024) did a study titled “Socio-demographic Correlates of Psychological Resilience among Emergency Responders” adopted a correlational design. The population included emergency responders in Nairobi, with a sample size of 140. Instruments included the Resilience Scale for Adults. Data were collected through structured questionnaires and analyzed using Pearson correlation. Results showed a moderate positive correlation between age and resilience, indicating that resilience increases with age.

Additionally, Otieno (2025) carried out a study titled “Predictors of Psychological Resilience among Humanitarian Workers in Kenya” using a descriptive survey design. The population consisted of NGO staff across Nairobi and Turkana, with a sample size of 190. Data were collected using the Brief Resilience Scale. Questionnaires were administered physically in organizational settings. Data were analyzed using multiple regression analysis. The findings indicated that age was a strong predictor of resilience, alongside work experience and organizational support.

Naidoo and Pillay (2023) conducted a study titled “Age and Psychological Resilience among Trauma-Exposed Humanitarian Workers” using a cross-sectional survey design. The population included NGO and emergency workers in Johannesburg, with a sample size of 210. Instruments used were the CD-RISC and General Health Questionnaire. Data collection involved structured surveys distributed in workplaces. Analysis was conducted using regression analysis. Results revealed that older participants showed greater resilience and lower trauma symptoms, reinforcing the role of age in resilience development.

A study by Crocker and Wilson (2023) titled “*Resilience of Social Auxiliary Workers: Defined by Strengths and Coping Abilities*” employed a cross-sectional research design to examine factors influencing resilience among social auxiliary workers exposed to stressful and trauma-related work environments. The population comprised social auxiliary workers in South Africa, with a sample size of 152 participants selected through purposive sampling. Data were collected using standardized instruments measuring resilience, coping strategies, and socio-demographic characteristics. The procedure involved administering structured questionnaires to participants within their workplace

settings under ethical supervision. Data were analyzed using descriptive statistics and correlational analysis. The findings revealed that age did not have a significant relationship with resilience, as resilience was more strongly influenced by interpersonal strengths, organizational support, and coping abilities rather than demographic variables. This aligns with broader evidence that some studies have found no significant correlation between age and resilience in trauma-exposed populations

Theoretical/Conceptual Framework

The Aaron Antonovsky Salutogenesis Theory of Resilience (1978, 1979) is highly relevant to this study because of its emphasis on the Sense of Coherence (SOC) as a key determinant of how individuals respond to stress and trauma. According to the theory, individuals with a strong SOC characterized by comprehensibility, manageability, and meaningfulness are better able to withstand and recover from traumatic experiences. This is particularly important for humanitarian aid workers in North Eastern Nigeria who are frequently exposed to distressing situations. Socio-demographic variables such as age, education, and work experience can influence the development of SOC, thereby explaining variations in resilience levels among workers. Hence, the theory provides a clear justification for examining how these characteristics shape psychological trauma resilience.

Another major relevance of the theory lies in its health continuum perspective, which views health as a dynamic movement between “ease” (well-being) and “dis-ease” (illness), rather than a fixed state. This perspective aligns closely with the concept of psychological resilience, which focuses on the ability to maintain or regain mental well-being despite adversity. In the context of this study, socio-demographic factors such as marital status, gender, and social background may influence where individuals fall along this continuum. For example, workers with strong family support systems may be better positioned toward the “ease” end, demonstrating higher resilience. This makes the theory particularly useful in understanding resilience not just as the absence of trauma, but as a positive adaptive process influenced by individual characteristics.

Furthermore, the theory’s concept of Generalized Resistance Resources (GRRs) provides a strong foundation for linking socio-demographic characteristics to resilience. GRRs include factors such as knowledge, social support, financial stability, and cultural resources that enable individuals to cope effectively with stress. These resources are often unevenly distributed based on socio-demographic

variables. For instance, higher educational attainment may enhance problem-solving skills, while better economic status may provide access to support systems and coping tools. In the challenging environment of North Eastern Nigeria, where humanitarian workers operate under significant stress, access to these resources becomes critical in determining resilience. Thus, the theory justifies the study's focus on how socio-demographic factors influence the availability and utilization of coping resources.

Furthermore, the Salutogenesis Theory is highly applicable to high-stress and crisis contexts, making it particularly suitable for studying humanitarian aid workers. The theory explains how individuals can maintain psychological stability despite prolonged exposure to trauma by relying on internal strengths and external resources. It also supports preventive and intervention-based approaches by emphasizing the strengthening of coping capacities rather than merely addressing psychological problems after they occur. This relevance is important for the present study, as identifying socio-demographic factors associated with higher resilience can guide policies and interventions aimed at improving the well-being of humanitarian workers in North Eastern Nigeria.

Statement of the Problem

The rise in the need for humanitarian aid workers in the Northeastern part of Nigeria, which is ravaged by insurgency, banditry, and kidnapping, has become apparent that research in psychological resilience for humanitarian aid workers is needed. Studies have identified that psychological resilience among professionals who work in high stress environments can help avoid exhaustion (Anasori et al, 2022).

It is documented that emergency humanitarian aid workers have families and are often away from family members when providing services; despite the common objective of providing and delivering needed services, they also hold different statuses within their respective families that require certain responsibilities. More so, there is the challenge of divergent culture other than theirs at duty stations. Given that humanitarian aid workers are faced with risk to safety and mental health in the line of duty (Foo et al, 2021), their ability to provide humanitarian aid efficiently in these circumstances is very vital to humanitarian aid framework. In view of the sometimes-difficult condition in which they must provide humanitarian aid, the level of psychological resilience to provide these services needs to be ascertained given the plethora of other factors such as socio-demographic characteristics that could

influence service provision. Very little is known about the role socio-demographic variables such as of age plays in relation to the psychological resilience of humanitarian aid workers' ability to perform their duty in developing countries such as Nigeria, particularly in the North-Eastern region. It is pertinent, therefore, to investigate how humanitarian aid workers' ability to provide needed services to victims are influenced by socio-demographic factors.

Objective of the Study

1. To examine the influence of age on humanitarian aid workers' psychological resilience.

Hypothesis

1. There will be a significant main effect of age on psychological trauma resilience of humanitarian aid workers.

Methodology

The descriptive design of the survey type was adopted for the study. The study population comprises of humanitarian aid workers that are actively engaged in humanitarian response in North-East Nigeria for a minimum of two years and employed by United Nations agencies, International or local Non-governmental Organization (INGO and NGO).

The minimum sample size for the study was determined using G*Power software application for an F-test ANOVA: Fixed effects, special, main effects and interactions, considering a small effect size of 0.25 and error probability α of 0.05 and required statistical power of .95 for three independent variables (Faul, Erdfelder, Buchner, & Lang, 2009). The power analysis for this study indicated a minimum sample size of two hundred and twenty-one (N = 251) participants.

Convenience sampling methods will be employed in selecting participants for this study. This is because only participants available at the time of data gathering will be included in the study against a random sampling method that ensures that every member of the population has an equal opportunity of representation in the study. Besides, the population of interest for this study is too large to examine and consider.

The Connor Davidson Resilience Scale (CD-RISC) developed by Connor and Davidson (2003) was used to measure individual resilience. The one-way Analysis of Variance (ANOVA) was used as the statistical tool of analysis in the study.

Result

Hypothesis: There will be a significant main effect of age on psychological trauma resilience of humanitarian aid workers.

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	2.634	1	2.634	.008	.929
Within Group	193268.522	584	330.939		
Total	193271.155	585			

The one way ANOVA table reveals that age does not have a significant effect on psychological trauma resilience of humanitarian aid workers $F(1, 585)=0.008, p= 0.929$

Discussion

The result indicates that age does not have a significant effect on psychological trauma resilience of humanitarian aid workers. The finding of the study agrees with Harris et al (2016). One possible reason why age does not have a significant effect on psychological trauma resilience among humanitarian aid workers is that resilience in this population is more strongly shaped by professional training, field experience, and organizational support rather than chronological age. Humanitarian workers are often exposed to similar training programs, coping strategies, and psychological preparedness initiatives before and during deployment. These structured interventions can equip both younger and older workers with comparable resilience skills, thereby minimizing age-related differences. Additionally, repeated exposure to crisis situations may lead to the development of adaptive coping mechanisms across all age groups, creating a level of psychological uniformity in how trauma is managed.

Conclusion

The study shows that age does not have significant influence on the psychological trauma resilience among humanitarian aid workers, indicating that psychological resilience is relatively consistent across different age groups. This outcome underscores the idea that resilience in high-risk

humanitarian contexts is less dependent on chronological maturity and more influenced by shared professional experiences, training, and exposure to similar stressors. As such, both younger and older workers appear equally capable of adapting to and managing the psychological demands of humanitarian service. Furthermore, the study highlights the complex and multifaceted nature of resilience, which is shaped by a combination of psychological, social, and environmental factors rather than a single demographic variable. It implies that individual differences in resilience are better explained by factors such as coping strategies, emotional intelligence, and support systems. Therefore, age alone may not provide a sufficient basis for predicting or understanding resilience levels among humanitarian personnel.

Recommendations

Based on these findings, it is recommended that:

1. Organizations focus on strengthening resilience-building programs that are inclusive of all age groups rather than tailoring interventions based solely on age.
2. Emphasis should be placed on enhancing coping skills, providing continuous psychological support, and fostering strong team dynamics within humanitarian settings. Such approaches are likely to be more effective in improving resilience than age-specific strategies.
3. Future research should explore other variables that may have a more significant impact on psychological trauma resilience among humanitarian aid workers. Factors such as emotional intelligence, personality traits, organizational support, and prior exposure to trauma should be examined in greater depth.
4. Incorporating these variables into future studies will provide a more comprehensive understanding of resilience and inform the development of targeted interventions aimed at improving the well-being of humanitarian workers.

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