



Association Between Depression and Suicidal Behavior with Resilience Among Internally Displaced Persons Affected by Banditry in Northwestern Nigeria

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DOI: 10.5281/zenodo.20679641

Submission Date: 25 April 2026 | Published Date: 13 June 2026

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Abstract

Background

Internally displaced persons (IDPs) affected by armed violence are at increased risk of mental health disorders, including depression and suicidal behavior. Resilience has been identified as a potential protective factor; however, its role among IDPs affected by banditry in northwestern Nigeria remains underexplored. This study examined the association between depression, suicidal behavior, and resilience among IDPs displaced by banditry.

Methods

A descriptive cross-sectional study was conducted among 230 internally displaced adults residing in camps and settlements in Sokoto State, northwestern Nigeria. Participants were recruited using systematic sampling. Major depressive disorder was assessed using the Mini International Neuropsychiatric Interview Version 7 (MINI-7), suicidal behavior was measured using the Suicide Behaviors Questionnaire-Revised (SBQ-R), and resilience was evaluated using the 10-item Connor-Davidson Resilience Scale (CD-RISC-10). Descriptive statistics were used to determine prevalence rates. Point-biserial correlation analyses were performed to examine associations between resilience and both depression and suicidal behavior.

Results

The prevalence of major depressive disorder was 57% (95% CI: 50.3%–63.4%), while 29.6% (95% CI: 23.7%–35.9%) of participants reported suicidal behavior. There was a negligible positive correlation between resilience and depression ($r_{pb} = 0.035$, $p = 0.596$), and between resilience and suicidal behavior ($r_{pb} = 0.019$, $p = 0.772$). Neither association was statistically significant.

Conclusion

This study found no statistically significant association between resilience and depression or suicidal behavior among IDPs affected by banditry. These findings suggest that resilience alone may not sufficiently explain mental health outcomes in this population and underscore the importance of considering broader psychosocial and contextual determinants in intervention planning.

Keywords: Internally displaced persons, depression, suicidal behavior, resilience; banditry.

INTRODUCTION

Internally Displaced Persons (IDPs) are people or communities who are compelled to leave their homes as a result of armed conflict, violence, disasters, or human rights abuses, yet they do not cross international borders and remain within their own country.¹⁻³ Since 2003, global trends have shown a continuous increase in the number of people displaced by conflict and violence.⁴ Over the last 13 years, an estimated 5.2 million individuals have been forced to flee annually, mainly due to terrorism, political turmoil, and insurgent activities, especially in the Middle East and Sub-Saharan Africa.⁴ In 2021, the United Nations High Commissioner for Refugees (UNHCR) reported 55 million internally displaced persons (IDPs) globally,⁵ with Sub-Saharan Africa hosting the largest proportion—accounting for over one-third of the total.⁶ Nigeria had the highest number of IDPs in Africa, followed by the Democratic Republic of Congo and Sudan.⁶ Nigeria is witnessing a rise in internal displacement due to banditry, armed conflict, and environmental disasters, with recent surges in banditry in the Northwest geopolitical zone contributing significantly to this trend.^{2,7}

Banditry is a form of organized crime that includes kidnapping, armed robbery, murder, rape, cattle theft, and the misuse of natural resources.⁸ In northwestern Nigeria, the persistent operations of bandits have led to large-scale abductions, injuries, deaths, displacement of people, livestock theft, and major interruptions to social and economic life.⁹ Banditry in Northwestern Nigeria has affected approximately 21 million people across states such as Zamfara, Kaduna, Sokoto, Kebbi, and Katsina.⁸ According to CARE, around 1.8 million Nigerians were internally displaced in 2021 alone.¹⁰ In Sokoto State, over 200,000 individuals have been displaced, while more than 35,000 have fled to the Niger Republic due to the destruction of their communities.⁸ Worryingly, these figures continue to grow as the attacks persist.²

IDPs are at greater risk of experiencing mental disorders such as depression as well as suicidal behaviors.¹¹⁻¹³ Depression is a mental health condition marked primarily by a persistent low mood, lack of interest in enjoyable activities, and reduced energy. It is often accompanied by poor concentration, low self-esteem, feelings of guilt or worthlessness, negative thinking, suicidal thoughts, and sleep disturbances. These symptoms must persist nearly every day for at least two weeks and typically result in functional impairment.^{14, 15} Depression is a leading cause of global disability and a major public health concern. If not treated, it can result in suicide.¹⁶ Suicide is the intentional act of ending one's own life, carried out with the awareness that it will result in death.¹⁷ Suicidal behaviors, on the other hand, are non-fatal actions or thoughts that often occur before a completed suicide and include suicidal ideation, planning, and attempts.¹⁷

Resilience is the capacity to withstand or quickly recover from difficulties, as well as the ability to bounce back and adapt positively in the face of adversity.¹⁸ It serves as a personal protective factor that promotes mental health and is closely associated with mental disorders.¹⁹⁻²³

Considering the growing number of people internally displaced by banditry attacks in Nigeria and their increased vulnerability to depression and suicidal behavior, this study was crucial in assessing the association between these mental health outcomes and resilience among IDPs.

The aim of the study was to determine the association between depression and resilience, as well as between suicidal behavior and resilience, among internally displaced persons affected by banditry in Nigeria.

Methodology

This descriptive cross-sectional study was conducted in Sokoto State, located in northwestern Nigeria. The study was carried out across internally displaced persons (IDP) camps and settlements hosting over 10,000 individuals displaced by banditry.

A systematic sampling technique was employed to recruit a total of 230 participants. Inclusion criteria were: being 18 years of age or older, displacement specifically due to banditry, and fluency in either Hausa or English.

Individuals with a prior diagnosis of a mental disorder before displacement, as well as those who declined to provide informed consent, were excluded from the study.

Ethical approval was obtained from the Sokoto State Ministry of Health. Participation was voluntary, and informed consent was obtained from all participants. Confidentiality and anonymity were strictly maintained throughout the study.

Study instruments

Interviews were conducted using a sociodemographic questionnaire, the Mini International Neuropsychiatric Interview Version 7 (MINI 7.0), the Suicide Behaviors Questionnaire-Revised (SBQ-R), and the 10-item version of the Connor-Davidson Resilience Scale (CD-RISC-10).

Socio-Demographic Questionnaire

The socio-demographic questionnaire was used to collect information on participants' socio-demographic characteristics which included age, sex, marital status, tribe, religion, occupation, employment status, estimated monthly income, level of education, family type and current living conditions.

MINI International Neuropsychiatric Interview (MINI)—7th Version

The MINI, version 7, is a short, structured diagnostic interview intended for both clinical practice and research purposes. It comprises 16 modules labeled A through P, each corresponding to a specific diagnostic category. In this study, the module assessing major depressive disorder was administered to every participant. The MINI has shown strong reliability and validity, with the MDD module showing a sensitivity of 0.94, specificity of 0.79, and positive and negative predictive values of 0.82 and 0.93, respectively.²⁴ Additionally, it has been employed in prior research carried out in Nigeria.²⁴

Suicide Behaviors Questionnaire-Revised (SBQ-R)

The SBQ-R is a four-item self-report questionnaire developed to evaluate suicidal behavior.²⁵ It has been validated for use in the general population, demonstrating a sensitivity of 0.8821 and a specificity of 0.879.²⁶ The tool has also been utilized in studies conducted in Nigeria to measure suicidal behaviors.^{27, 28} In this study, participants who reported suicidal ideation, planning, or attempts were categorized as having suicidal behavior, while those who did not report any of these were classified as not having suicidal behavior.

Connor-Davidson Resilience Scale (CD-RISC) 10-item Version

The 10-item Connor-Davidson Resilience Scale (CD-RISC) is an instrument for assessing psychological resilience, adapted from the original 25-item version. Each item is scored on a 4-point Likert-type scale (0 = never to 4 = almost always) with a maximum score of 40. The scale was scored by the respondents according to how much they agree that each item is relevant for them. Greater psychological resilience is indicated by higher scores. It is highly correlated with the original 25-item CD-RISC ($r=0.92$) and has acceptable reliability ($\alpha=0.85$). The scale has been used as a valid measure of resilience in Nigeria.^{29, 30}

Statistical analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics were used to determine the prevalence of depression and suicidal behavior among the participants. Point-biserial correlation analyses were conducted to assess the association between depression and resilience, as well as between suicidal behavior and resilience.

Results

The prevalence of major depressive disorder among the participants, determined using the Mini International Neuropsychiatric Interview version 7 (MINI-7), was 57% (95% CI: 50.3%–63.4%). Assessment with the SBQ-R indicated that 29.6% of participants reported suicidal behavior (95% CI: 23.7%–35.9%).

There was a weak, positive correlation between depression and resilience, as measured by CD-RISC scores ($r_{pb} = 0.035$) among the participants, which was not statistically significant ($p = 0.596$) (Figure 1). Similarly, a weak, positive correlation was observed between suicidal behavior and resilience, as measured by CD-RISC scores ($r_{pb} = 0.019$), which was also not statistically significant ($p = 0.772$) (Figure 2).

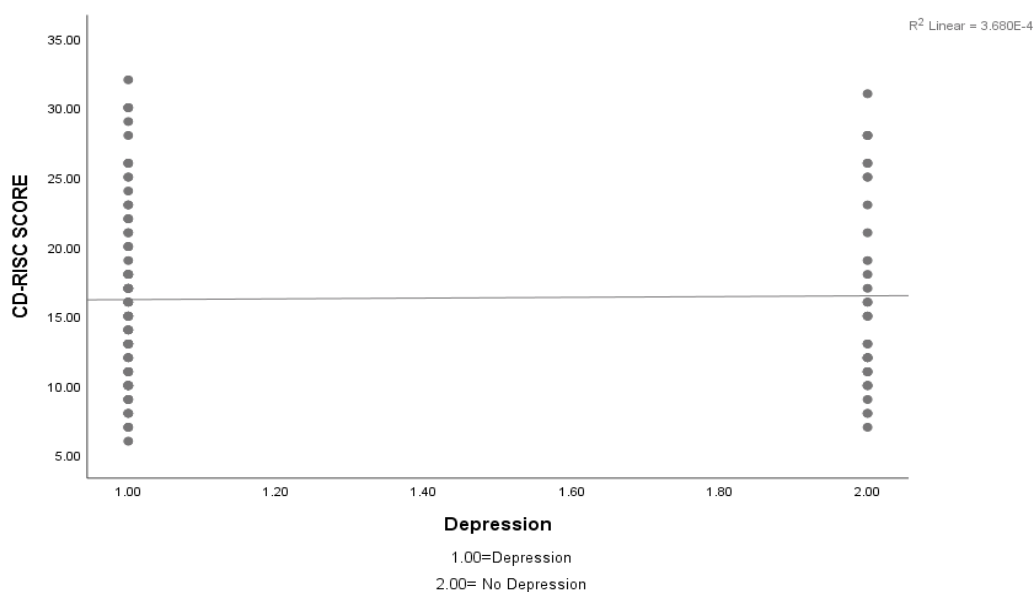


Figure 1: Scatter Plot of Point-Biserial Correlation Between Depression and resilience (CD-RISC Scores)

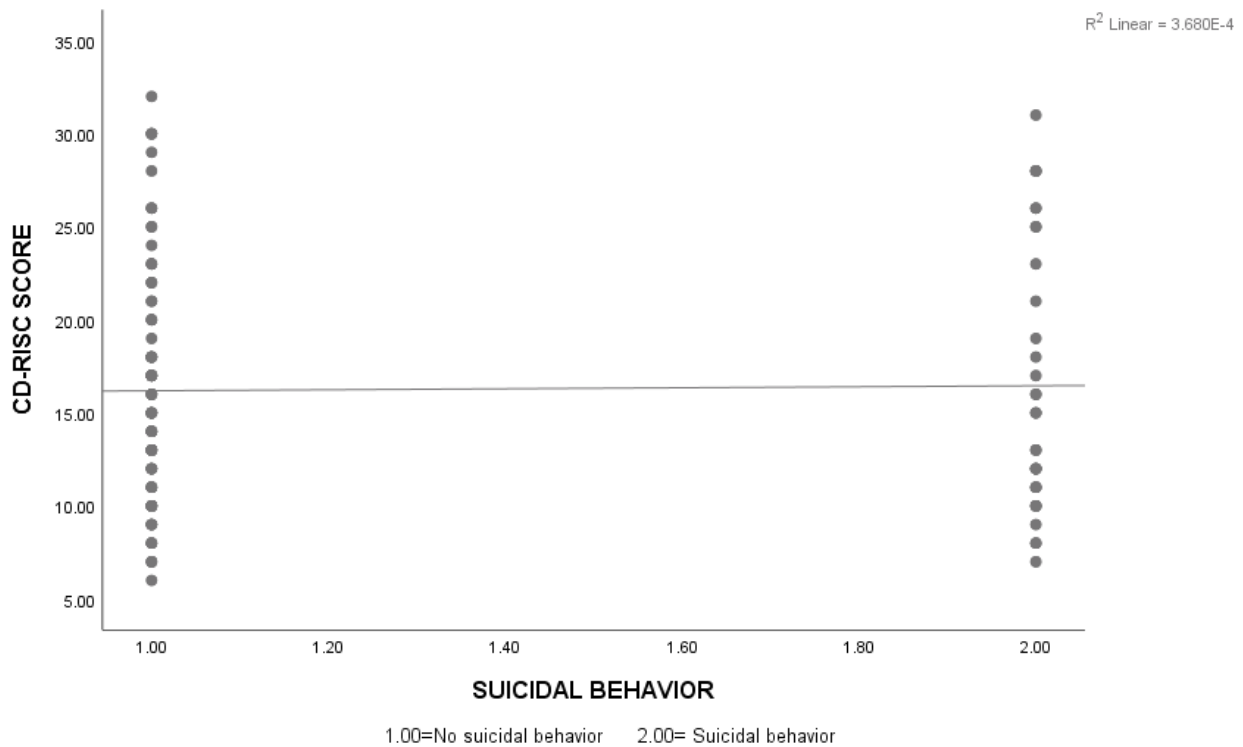


Figure 2: Scatter Plot of Point-Biserial Correlation Between Suicidal behavior and resilience (CD-RISC Scores)

Discussion

This study found a weak, positive correlation between depression and resilience (as measured by CD-RISC scores) among internally displaced persons, which was not statistically significant. The weak positive correlation ($r_{pb} = 0.035$) suggests only a slight tendency for higher resilience scores to be associated with the absence of depression. However, because the correlation is minimal, this finding indicates that resilience and depression may not be strongly linked among the participants. The lack of statistical significance ($p = 0.596$) implies that the observed relationship could be due to random chance rather than a true underlying association.

This result may reflect the complex nature of both constructs, as resilience and depression can be influenced by multiple interacting factors. While resilience may help mitigate some aspects of depression, other determinants—such as chronic stress, trauma severity, and socioeconomic hardship—could overshadow its protective effect. Additionally, contextual factors such as community support, cultural attitudes towards mental health, and the unique challenges faced by internally displaced persons might further attenuate any association between resilience and depression.

Similarly, the study found a weak, positive correlation between suicidal behavior and resilience ($r_{pb} = 0.019$), which was also not statistically significant ($p = 0.772$). This minimal positive association suggests that higher resilience scores were only very slightly linked to higher suicidal behavior. However, the weakness of this correlation means that resilience and suicidal behavior do not appear to be meaningfully associated among the participants.

Again, this may be attributable to the complexity of these phenomena. For some individuals, high resilience might not directly translate to lower suicidal behavior, especially in the presence of severe trauma, persistent hopelessness, or mental health disorders. Other unmeasured variables—such as access to mental health services, social support networks, and physical health conditions—may also have confounded the relationship.

The finding in this study contrasts with the results of a study conducted in Islamabad, Pakistan, by Arooj and colleagues, titled *Resilience, Stress, Anxiety, and Depression among Internally Displaced Persons Affected by Armed Conflict*, which found a significant inverse correlation between resilience and depression.²¹ This difference in findings may be attributable to several factors. First, the nature and chronicity of trauma experienced by IDPs affected by banditry in Nigeria may differ from those affected by armed conflict in Pakistan. Prolonged and repeated exposure to violence and insecurity could weaken the protective association between resilience and depression. Additionally, cultural and contextual differences, including variations in community support systems and attitudes toward mental health, may influence the role resilience plays in mitigating depressive symptoms. Finally, environmental factors such as access to services, socioeconomic conditions, and the availability of psychosocial support may also shape the relationship between

resilience and depression differently across settings. Other studies have also reported a significant association between resilience and mental health outcomes among displaced persons.^{19,31,32}

Conclusion

This study found no statistically significant association between resilience and depression or suicidal behavior among internally displaced persons affected by banditry. These findings suggest that resilience alone may not sufficiently explain mental health outcomes in this population, highlighting the need to explore broader contextual and psychosocial determinants.

Limitation

A major limitation of this study is that its findings may not be widely generalizable, as the research focused solely on IDPs living in camps and settlements. Those who were living with host families or had left the camps for other reasons were not included, potentially resulting in selection bias. Additionally, unmeasured confounding factors that may influence resilience, depression, and suicidal behavior—such as social support, post-traumatic stress disorder (PTSD), access to care, and coping styles—were not assessed or controlled for, potentially confounding the observed relationships and diluting any true associations.

Funding

This study was funded by the researchers.

Conflict of interest

The authors have no conflict of interest to declare.

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CITATION

Ibrahim, A. H., Amedu, M. A., Umar, M. U., Bakare, A. T., Baguda, A. S., Ibrahim, A., Ibrahim, Y. A., Umar, Z., Sarki, J., Akilu, A., Inuwa, S. A., & Hussaini, A. (2026). Association Between Depression and Suicidal Behavior with Resilience Among Internally Displaced Persons Affected by Banditry in Northwestern Nigeria. *Global Journal of Research in Medical Sciences*, 6(3), 58–63. <https://doi.org/10.5281/zenodo.20679641>