

Displacement and Depression: Do Social Support, Self-Concept, and Health Locus of Control Matter?

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ABSTRACT

Depression is a psychological concern among Bakassi returnees yet evidence concerning the relationships of social support, health locus of control, and self-concept associated with depression among Bakassi returnees in Nigeria remains limited. Guided by Learned Helplessness Theory, this study examined the independent and interactive associations of social support, health locus of control, and self-concept with depression among 222 Bakassi returnees in Eket and Ibiono Ibom Local Government Areas of Akwa Ibom State, Nigeria. A cross-sectional survey design was adopted, and data were collected using standardized measures. Data were analysed using a $2 \times 2 \times 2$ factorial analysis of variance (ANOVA). Results revealed a significant main effect of social support on depression, $F(1, 214) = 14.82, p < .001$, partial $\eta^2 = .065$, with depression scores differing significantly between low- and high-social-support groups. Self-concept also showed a significant main effect, $F(1, 214) = 26.03, p < .001$, partial $\eta^2 = .108$, with depression scores differing significantly between low- and high-self-concept groups. Health locus of control showed no significant main effect. None of the two-way interactions among the variables was significant, and the three-way interaction was also nonsignificant. Thus, social support and self-concept were independently associated with depression, whereas health locus of control showed no significant independent association. The nonsignificant interactions indicate that these associations did not significantly vary across levels of the other psychosocial variables. Findings highlight the relevance of social support and self-concept in understanding depression among Bakassi returnees and may inform psychosocial assessment and support programmes.

Keywords: Depression; internally displaced persons; Bakassi returnees; social support; health locus of control; self-concept, psychosocial factors; Nigeria

INTRODUCTION

Depression is one of the most common and debilitating form of psychological disorder observed in the world, irrespective of socioeconomic, cultural or age groups. It is a mood disorder characterized by persistent sadness, decrease in interest, change in eating and sleeping patterns, fatigue, low self-worth and feelings of guilt, difficulty concentrating and in severe cases, suicidal thoughts. According to WHO, (2025), It is estimated that 332 million people have depression globally and depression ranks as one of the top contributors to the global burden of disease. Depression is not only emotionally distressing, it also has psychomotor effects, affects social and occupational functioning, and has chronic physical health implications in the long term, as well as the increased risk of premature death. Depression may occur as a result of a number of biogenetic, psychological and environmental influences, but certain life situations can greatly increase depression vulnerability. Of these, forced displacement has remained a constant and especially strong trigger for depressive symptoms.

An internally displaced person (IDP) is a person who has been forced to flee or leave their home as a result of armed conflict, generalized violence, human rights violations, or disasters, but who has not crossed an internationally recognized international border. In the context of this study, the term refers specifically to

Bakassi returnees who were displaced from the Bakassi Peninsula and relocated to communities in Akwa Ibom State, Nigeria. Unlike refugees, returnees do not cross an international border and they are not directly protected by international refugee law; their well-being is largely dependent on the national government which is often weakened as a result of the very crises that lead to displacement. The situation of internal displacement in the world is unprecedented. At the end of 2024, there were an estimated 83.4 million returnees, the highest number of any year since the returnee file began, of which nearly nine out of ten were caused by conflict and violence, not disasters (Internal Displacement Monitoring Centre, 2025). Sub-Saharan Africa is still being hit hardest by this crisis with nearly half of the world's returnees.

The prevalence of depression in returnee populations in conflict settings in Africa has been reported repeatedly at very high levels compared with the general population. For instance, in Somalia, over half of the returnees sampled in Mogadishu fulfilled the criteria for depression symptoms, and returnee unemployment and cumulative trauma exposure and repeated displacement were found to be important risk factors (Ali, Mutavi, Mathai, & Mburu, 2023). Likewise, a large community-based study conducted among returnees in Metekel Zone, Ethiopia, reported depression rates close to the one in ten people (Bekeko, Nimani, Darcho, & Bayisa, 2025), highlighting how cumulative exposures to loss, insecurity, and disrupted social support can exceed normal coping capacity. A recent systematic review of displaced youth in low and middle-income countries also found that unresolved stressors associated with displacement and little access to structured psychosocial support remain to put displaced populations at higher and ongoing risk of depressive and anxiety symptoms beyond the emergency phase (Seguin, Cavagnoud, Gianella, Khomych, & Vibla, 2025). Collectively, this evidence suggests that returnee depression is more than a short-term mental health response to crisis but an enduring mental health burden that demands continuous empirical and clinical study, especially in Africa, home to a large, increasing and under-resourced returnee population.

The risk of depression is not equal across all displaced populations. Women and children, who are likely to be the most numerous presence in camps, are especially vulnerable to gender-based violence, lack of caregiving support, and lack of access to education and livelihoods, while men are disproportionately likely to experience loss of the role of provider, and limited opportunities for economic engagement. Multiple years in camps, multiple episodes of forced movement and the slow process of finding durable resettlement solutions further embeds psychological distress as a chronic mental health issue.

Nigeria is a model of this trend. The conflict between the herders and farmers in the North-East, banditry in the North-West and North-Central regions and other communal and boundary conflicts across the country have led to one of the largest internal displacement situations in Africa. According to the data from the International Organization for Migration Displacement Tracking Matrix (2024), the north-central and north-western states of Nigeria alone account for more than 1.3 million returnees, and the national estimates are more than three million people affected by the conflict. These numbers would not include the concentration of new, longer-term people displaced by previous conflicts on the borders such as the prolonged resettlement of Bakassi returnees from the transfer of the Bakassi peninsula to Cameroon, who continue to live in tented camps years after their displacement. Displacement for these populations is not always temporary, but can often be a continuous state of living with a disrupted family and community structures, inadequate shelter, loss of livelihood, and uncertain futures.

In Nigeria, in particular, returnees are located in many informal and formal camps, receiving different levels of humanitarian assistance, while the government's capacity to resettle returnees varies and communities' reintegration capacity is also very different, making the psychological wellbeing of returnees a concern that goes beyond the individual, influencing public health planning, social stability, and the overall effectiveness of post-conflict recovery and reintegration interventions. To understand the reasons for the manifestation of depression in some displaced persons and not in others, one must pay attention to the psychosocial resources and belief systems that people bring to their situation. There are three of these that are addressed in this study: social support, health locus of control, and self-concept.

Social support is the perceived or actual assistance, comfort and sense of belonging that one receives from family, friends and the community. It acts as a buffer to the psychological effects of stressful life events, also giving displaced persons hands-on help and emotional reassurance that they are appreciated, not alone in such

difficulties. Without this kind of support, or when it is removed by the process itself (often the separation of individuals from existing support networks), the protective buffer it once provided is lost, and the individuals are more vulnerable to depression. Empowering findings continue to support this protective function: In one 2022 study of college students, social support emerged as a consistent protective factor for psychological outcomes and was shown to have a key chain mediating role in reducing depressive symptoms, alongside self-concept (Zhang *et al.*, 2022).

Health locus of control is the degree to which people attribute their health to their own efforts (an internal health locus of control) or to chance, fate, or powerful others (an external health locus of control). Those more external oriented have been found to have reported higher levels of psychological distress as a loss of personal agency over one's situation can lead to a sense of helplessness. Yet, recent research on this link has yielded mixed results, with certain studies showing an association between externality with mental health problems in clinical and aging groups, whereas others indicated that externality does not influence depression when other factors are taken into account (Schönenberg, Zipprich, Teschner, & Prell, 2022). These discrepancies put health locus of control as one of the most significant variables to be re-examined in the context of returnees, as their situation of displacement can change the nature of the relationship between personal control beliefs and mental health.

Self-concept, a composite verbal image people develop of themselves, what they can accomplish and how they are seen by others, has also been linked to the onset and persistence of depression. Cognitive models of depression posited that negative self-concept, triggered by negative external events, leads to a distortion in self-awareness and the environment, as well as future expectations, which maintains symptoms of depression. This has been recently supported by empirical research: a longitudinal study revealed that lower self-concept was a significant predictor of children's development of depressive symptoms the following year (Morales *et al.*, 2023), and a large-scale meta-analysis of youth mental health found that there was a bidirectional relationship between lower self-concept and depression, with each predicting the other's worsening over time (Yeo *et al.*, 2023). For those who have been displaced from their homes, livelihoods, and social standing, the loss of self-concept can be a significant route to depression, as displacement can take away the roles, accomplishments, and social standing that a positive self-concept is based on.

Although there is a significant amount of international and African literature that has associated poor mental health with displacement, few empirical studies have focused on the psychosocial and cognitive resources that could account for the differences in depression among people who experience broadly similar displacement-related adversity. Individuals' depression has been associated with one of these factors, social support, health locus of control, and self-concept, separately, across various populations, including college students, clinical patients, and older adults with chronic illness (Schönenberg, Zipprich, Teschner, & Prell, 2022; Zhang, Zheng, & Hu, 2022). Numerous studies on displacement and mental health in Nigeria and elsewhere in Africa have focused on trauma exposure and post-traumatic stress disorder, while paying less attention to the individual's psychosocial and cognitive capacities that could account for varying degrees of depression among the displaced.

This gap has implications in practice. Most humanitarian actors, mental health practitioners and policy makers have to extrapolate from non-displaced or non-Nigerian populations to design interventions, given the lack of evidence on which of these factors (social support, health locus of control, or self-concept) most strongly predicts depression among returnees, and whether these factors interact to compound psychological risk. Because social support and positive self-concept are often derived from networks and structures (e.g., family, community, employment, social role), which are disrupted as a result of the displacement experience, results from settled populations may not be easily translated to the context of displacement. Similarly, the feeling of control over health outcomes can also be affected by humanitarian dependency, making it hard to determine whether internal or external health locus of control works in the same way for returnees as in the general population.

In this context, the present study takes place. The problem this study seeks to address is thus the lack of empirical knowledge as to the independent and combined effects of social support, health locus of control on the expression of depression among returnees in Nigeria. This is important not only to deepen the

understanding of depression in the context of displacement but also to provide evidence for the creation of more targeted psychosocial support programming, psychosocial interventions in camps and policy initiatives to diminish the mental health burden of one of the most vulnerable groups in the country.

Theoretical Framework

The theoretical framework for this study is the Learned Helplessness Theory. Originally propounded by Seligman (1975) was based on experimental studies that found organisms given repeated exposure to uncontrollable aversive events would no longer try to escape those events even if escape is later made possible. Motivational, cognitive, and emotional deficits accompanied this learned passivity and were strikingly similar to the clinical features of depression: lack of perceived effectiveness of response, low level of self-activity, and persistent depressed mood. Seligman extended this to humans, and suggested that depression could be, at least partly, understood as the psychological residue of learning that things will not result from one's behaviour.

In order to explain individual differences, why some people become helpless and depressed after events that they cannot control, and others who are similarly exposed to the same events do not become helpless and depressed, Abramson, Seligman, and Teasdale (1978) reformulated the theory in attributional terms. In this modified version, it's not merely the contingency that leads to helplessness becoming depression, but the causal account, or attribution that one forms of negative events. The attributions differ in three aspects: internal/external (causal factors being either internal or external to the individual), stable/unstable (whether the cause was considered to be stable or unstable over time), and global/specific (whether the cause is thought to affect many aspects of life or just one). Those who consistently make negative causal attributions to stable and internal causes are also thought to be at greatest risk for depression since such attributions spread the helplessness to the present and to the future, and undermine the person's self-assessment of worth and competence. This attributional emphasis was extended in the hopelessness theory of Abramson, Metalsky and Alloy (1989) who argue that there is a generalised expectation that desired outcomes are impossible to achieve, and that there is little that an individual can do to change this, which is the proximal cause of depressive symptoms, and that low self-esteem is a contributing factor to this hopelessness.

The internal-external attributional dimension of the reformulated helplessness model is similar to health locus of control, as developed by Wallston and Wallston (1978, 1981) and based on the social learning theory of Rotter (1966). Internally displaced persons with an external health locus of control, who feel that events in their lives are determined by chance, fate or others over which they have little control, are in helplessness terms, those who have generalized an external, largely uncontrollable causal structure to their situation. If this is indeed the case, these individuals would be expected to be more helpless, and therefore more depressed than those who still maintain strong internal loci of control and believe that within the confines of camp life, there is a connection between their actions and their results.

The stable and global attributional aspects of self-concept are also connected to the theory. If the negative event, like losing the home, job, and social position associated with displacement, is repeatedly blamed on stable and global causes within the self, the resulting set of conditions is what Abramson *et al.* (1978) describe as personal helplessness, which includes low self-esteem and a lowered, generalised self-concept. These findings are generally similar to cognitive theories of depression, which propose that a negative and inward-focused self-concept is both a consequence and a perpetuator of depressive experiences. By this argument, people living in the camps who have lost their former status, had been displaced and still rely on the camp for support should be more likely to suffer from depression than people who have kept their positive and stable sense of self.

Social support was not originally part of the framework for learned helplessness, but is a variable that naturally falls into place as an environmental factor that can interrupt the learned helplessness cycle. Experiences that give people a sense of control over themselves, or provide corrective feedback and alternative, less self-blaming explanations for hardship have been found to prevent or reverse helplessness. In this context, a robust network of family, camp community or humanitarian support can provide displaced persons with tangible aid and comfort to offset internal, stable, and global attributions to their situation. When this support is either

weak, non-existent or broken in the course of displacement, returnees are not relieved of this corrective influence and are assumed to be more vulnerable to the attributional pattern which leads to helplessness and depression.

Together, the Learned Helplessness Theory provides a coherent psychological explanation of why displacement, which is by its nature sudden, largely uncontrollable, and which disrupts an individual's normal coping mechanisms, may contribute to feelings of depression and why such feelings may differ systematically as a function of whether an individual's health locus of control is internal or external, as well as their self-concept and level of social support.

REVIEW OF EMPIRICAL LITERATURE

Depression among Internally Returnees

The empirical evidence confirms that returnees suffer from depression at disproportionate rates to non-displaced people, although the rates of depression reported vary widely by setting. In Nigeria, specifically, Ugbe, Esu, Efut, Bisongedam, Awa, and Ekpo (2022) investigated 335 returnee adults in Ogoja, Cross River State, and determined that 73.4% of the respondents experienced depression, while male gender, long-term displacement, economic problems, and the loss of family members were identified as key risk factors. These rates are comparable to the previously reported rates for Nigeria, with Aluh, Okoro, and Zimboh (2019) showing high prevalence of 96.1% of depression in returnees in Maiduguri, and Sheikh, Abdulaziz, Agunbiade, Joseph, Ebiti, and Adekeye (2015) showing high rates of depression morbidity among post-election returnees in Kaduna. Similarly, high rates have been reported in other conflict-afflicted sub-Saharan African nations: Ali *et al.* (2023) found depression prevalence of 59% among returnees sampled in Mogadishu, Somalia, and Bekeko *et al.* (2025) found depression prevalence of almost 80% among returnees in the Metekel Zone of Ethiopia using structural equation modelling. These quantitative patterns are supported with qualitative. Themes of isolation, hopelessness and lack of autonomy resulting from the prolonged camp confinement were documented by Timothy *et al.* (2025) in their study of the residents of the Bakassi returnee camp, Cross River State, Nigeria, which was carried out in the same community from which the present study was sampled while Olufadewa *et al.* (2022) studied the youth of returnees in the northern camps of Nigeria and observed that the young people were really depressed because of the violence and the continuous insecurity in the camps.

Despite this uniformity in direction, however, there is a wide range of literature reporting on the magnitude, ranging from approximately 59% to well over 96% depending on the instrument, conflict context and time since displacement. The variability implies that depression among returnees is not a universal consequence of displacement per se, but is influenced by other psychosocial factors, which in turn suggests that factors like social support, health locus of control and self-concept should be measured as variables in addition to displacement, rather than simply as a dependent and immediate consequence of it.

Social Support and Depression among Returnees

Social support, of the three predictors' variables has been studied most frequently, and the evidence is most consistent that social support is protective. In Ethiopia, Bekeko *et al.* (2025) reported that social support had a significant negative effect on depression, in part, by its effect on reducing anxiety among returnees. In a similar qualitative investigation of resilience in returnee camp-like settings in the North of Nigeria, Ekezie (2022) noted that the willingness of camp community members to reach out to other camp members who are experiencing anxiety and depression, as well as the social cohesion and the camp leadership system, was reported as reducing the factors that contribute to anxiety and depression. In Kenya, stronger social support networks had a positive impact on returnee mental health even when food insecure, Gichunge, Mutiso, and Brynjarsdottir (2020) found. These findings provide a support for the buffering hypothesis; social ties provide practical help to the displaced and make them feel more emotionally secure than they would without the social support, which balances the psychological impact of stressor stimuli associated with displacement.

The literature, however, is not always consistent regarding the way social support should be operationalised and regarding the direction of some results. Similarly, a large family size (as a proxy of embedded social

support) was associated with depression and anxiety reduction among Ogoja returnees (Ugbe *et al.*, 2022). The authors explained that this was due to the support that large families afford each other. This is in contrast to previous reports by Erol, Şimşek, and Öner (2005) for Turkish children and adolescents living in returnee shelters, which found a negative association between family size and risk of psychopathology. The latter may be explained by the fact that larger families are also likely to be less resourced and to have more difficult caregiving burdens. This separation shows that protection from social support network may be heavily related to the quality, structure and material support of the social network and not only the size of it, an aspect which may not be represented in studies based on simplistic measures of social support. In the present study, the use of a multidimensional, multi-item social support scale, rather than a demographic proxy is meant to overcome this measurement limitation.

Health Locus of Control and Depression

The empirical picture with regard to health locus of control is not as clear as it is for social support. The hypothesis that external locus of control is related to poorer mental health outcomes has been substantiated by some studies. In a study of older adults with chronic neurological conditions, Schöenberg, Zipprich, Teschner, and Prell (2022) were able to show that, in addition to resilience, locus of control had a meaningful impact on patients' expectations adjustments in the presence of depression, indicating that the role of control beliefs is psychologically relevant in the face of chronic adversity. Likewise, using a specifically designed locus of control scale for 327 Brazilian adults, Couto and Baptista (2023) observed a positive correlation between an external LOC and depression, and a negative correlation between an internal locus of control and depression, supporting the hypothesized positive relationship between locus of control and depression. A nuance added by Origlio and Stough (2024) is the fact that, in America, locus of control orientation helped predict changes in depression symptoms when the acute uncontrollability of the COVID-19 pandemic was added to normal life, lending plausibility to an analogy with displacement: pre-existing control orientations become especially relevant just when a large-scale uncontrollable event disrupts everyday life.

This is a convergent picture but is complicated by other recent findings. In the same sample of Brazilians, Couto and Baptista (2023) came to a surprising finding that internal locus of control was stronger related to depression compared to external locus of control, contrary to most previous studies, and suggested that this might be due to the particular instrument used and the cultural context of the sample. A paradoxical relationship between health locus of control and depression is also found with health-specific samples, as the predictors of depression levels found by Tremolada *et al.* (2020) in their study of caregivers of children with leukaemia is the internal vs. external locus of control, which is associated with an increase in the risk of depression, contrary to the general theoretical prediction, perhaps because those who feel responsible for outcomes they cannot control may experience more guilt and self-blame when such outcomes are negative. Together these results indicate that the relationship between health locus of control and depression might not be linear in all populations, contexts, or instruments as suggested by some previous theories of the relationship. The present study stands as a new contribution to the study of returnees in Nigeria and Africa as no published studies on depression were found that examined health locus of control directly as a predictor of depression.

Self-Concept and Depression

The relationship between depression and self-concept has been quite clear, but has been elaborated on since earlier research. A three-wave longitudinal study of children by Morales *et al.* (2023) concluded that a decrease in academic self-concept was significantly predictive of the development of depressive symptoms at a later time, thus suggesting a cause-effect relationship. In another large-scale meta-analysis of youth mental health, Yeo *et al.* (2023) found that there was a bidirectional relationship between low self-esteem and self-concept with depression, suggesting that both low self-esteem and self-concept predict depression, and that depression predicts both low self-esteem and self-concept. For both Chinese college student and nursing student samples, Zhang, Zheng, and Hu (2022) and Hong *et al.* (2022) reported that self-concept (measured by physical exercise pathways and self-concept clarity, respectively) had significant direct and mediated effects on depressive symptoms, both of which indicated that a positive and clear self-concept was protective.

However, in the literature on displacement, there are hardly any studies that measure self-concept directly, but there are studies of related concepts that converge. In line with lower self-concept scores being linked to

depression, the Bakassi returnees cited reduced self-empowerment and difficulties “to feel normal”, which echoed the results found by Timothy *et al.* (2025) in their study of Internally Displaced Persons (IDPs) in Bakassi, where the association between self-concept and depression was not consistently strong across all participants and measurement methods. Lawal, Akinsulore, Oginni, Aloba, Mosaku, and Akanmu (2023) conducted a study with adolescents living with HIV in the south-western part of Nigeria and found that those with depression had lower self-esteem scores, but, in this sample, the association was close to conventional statistical significance, highlighting the fact that even within Nigeria, the self-concept-depression relationship is not invariably strong across populations or measurement approaches. The literature review reveals some mixed conclusions as to whether self-concept is a direct predictor of depression or whether it is a mediator between other psychological factors (such as anxiety, physical illness) and depression; the data summarized in this paper support the possibility that self-concept may be both a direct predictor of depression and a mediator between other factors and depression, depending on the population and time frame examined.

Furthermore, when considered alone, each of these variables (social support, health locus of control, and self-concept) has reasonably consistent yet not so uniform patterns of depression associations across various populations. The combined effects of these three variables, both when they act separately and together, in a single displaced sample has yet to be extensively studied. The majority of the studies reviewed here only looked at one or two of the three variables and none of the studies reviewed here looked at all three at the same time with returnees. Moreover, the overwhelming bulk of studies on mental health and displacement, both in Nigeria and elsewhere in sub-Saharan Africa, have focused on trauma exposure and post-traumatic stress disorder as outcomes and depression is often treated as an indirect or secondary (and less often primary) target, while few if any studies have addressed psychosocial and cognitive resources that could account for varying vulnerability to depression.

Another gap is in respect to population specificity. Studies on the IDPs in Nigeria have increased in the North-East (Maiduguri, Kaduna) and more recently in Cross River State (Bakassi camps) but there is no literature that quantitatively examines the combined effect of social support, health locus of control and self-concept especially among Bakassi returnees. This population's experiences are unique because it has been displaced for a much longer period, for different reasons than the populations studied recently in Ethiopia, Somalia and northern Nigeria, and thus cannot be assumed to apply directly to the story in these other contexts. This conceptual gap along with the joint and interactive relationships of three under-integrated psychosocial variables (conceptual gap) and the population specific gap (Bakassi returnee context) is what the present study aims to address.

Accordingly, the primary aim of the study is to examine the independent and interactive relationships of social support, health locus of control, and self-concept with the manifestation of depression among ns, particularly Bakassi returnees, within the Nigerian context. Specifically, the study seeks to: determine the relationship between social support and the manifestation of depression among Bakassi returnees; examine the relationship between health locus of control and the manifestation of depression among Bakassi returnees; ascertain the relationship between self-concept and the manifestation of depression among Bakassi returnees; determine whether social support interacts with health locus of control in relation to the manifestation of depression among Bakassi returnees; examine whether social support interacts with self-concept in relation to the manifestation of depression among Bakassi returnees; determine whether health locus of control interacts with self-concept in relation to the manifestation of depression among Bakassi returnees; and examine whether the three-way interaction among social support, health locus of control, and self-concept is significantly associated with the manifestation of depression among Bakassi returnees.

Drawing on the extant theoretical and empirical literature, the present study advances the following hypotheses regarding the independent and interactive associations of social support, health locus of control, and self-concept with the manifestation of depression among Bakassi returnees:

Hypotheses

H₁: Social support will be significantly associated with the manifestation of depression among Bakassi returnees.

- H₂:** Health locus of control will be significantly associated with the manifestation of depression among Bakassi returnees.
- H₃:** Self-concept will be significantly and negatively associated with the manifestation of depression among Bakassi returnees.
- H₄:** There will be a significant interaction effect between social support and health locus of control in relation to the manifestation of depression among Bakassi returnees.
- H₅:** There will be a significant interaction effect between social support and self-concept in relation to the manifestation of depression among Bakassi returnees.
- H₆:** There will be a significant interaction effect between health locus of control and self-concept in relation to the manifestation of depression among Bakassi returnees.
- H₇:** There will be a significant three-way interaction effect among social support, health locus of control, and self-concept in relation to the manifestation of depression among Bakassi returnees.

METHODS

Research Design

The study used a survey research approach using a cross-sectional design, in which data on the three predictor variables (social support, health locus of control, and self-concept) and the outcome variable (depression) were collected simultaneously from a single sample of the target population at a single point in time. This design was felt to be suitable because it enabled the relationships between variables to be studied efficiently, in the absence of logistical requirements for a longitudinal design in a displaced population with a relatively transient membership, and because sampling every individual within the large and widely dispersed Bakassi returnee population was not feasible. Well structured, standardized questionnaires were used for the collection of data which were directly administered to the participants. The design also allowed the independent variables to be investigated at two levels: social support (high/low), health locus of control (external/internal), and self-concept (high/low), as well as the dependent variable depression (high/low).

Settings

The study was carried out in two Local Government Areas (LGAs) of Akwa Ibom State, Nigeria comprising of makeshift camps of Bakassi returnees which are located in Eket and Ibiono Ibom. The two Niger Delta regions in Nigeria are all within the Akwa Ibom State, where the Ibibio, Annang, Eket and Ibeno are all closely related ethnic groups. Ibiono Ibom is in the South-East side of the state with Cross River State, and neighbouring local government areas of Eket being on the South-Central part of the state. Both settlements have been chosen because they are where the highest numbers of Bakassi returnees have been resettled in the state after the cession of Bakassi peninsula to Cameroon.

Sample Size and Sampling Technique

Available records indicate that the National Commission for Refugees, Migrants and Internally Displaced Persons registered over 7,200 Bakassi returnees in nine locations across Akwa Ibom State in 2017, including Ikot Ada Idem, Ifa-Okon, Ituk Mbang, Atabong, Iko Ekit, Uta Ewa, Ikono, Mbo and Ikot Oto. However, subsequent academic and humanitarian evidence shows that returnees were dispersed across formal camps, makeshift settlements and host communities, including Ikot Ediom in Ibesikpo Asutan and Ituk Mbang in Uruan. Thus, the 2017 figure is best regarded as a historical administrative record rather than a current census. The participants were selected using purposive sampling technique which is a non-probability sampling. The purposive sampling was used to select those adults Bakassi returnees who lived in the two specified camps and were willing to be part of the study. This method was selected because the researcher was able to knowingly identify individuals who had the type of displacement that was pertinent to the study in a population that was not a random sample. Of the 240 questionnaires that were distributed, 224 were retrieved and 2 were

rejected for incomplete or improper completion, and were retained for the main study. Another 35 subjects participated in a pilot study prior to the research in order to validate the research instruments. Thus, sample size of Two hundred and forty (240) using purposive sampling technique was adjudged an adequate, reliable and suitable sample capable of yielding reliable result. Due to the itinerant nature of the Bakassi returnees, the number available were those who participated in the study.

Participants

The 222 main-study participants comprised 98 males (44.1%) and 124 females (55.9%). Of these, 109 (49.1%) were from Eket and 113 (50.1%) were from Ibono Ibom (57 males and 56 females respectively). Participants' ages ranged from 14 to 82 years ($M = 38.19$, $SD = 14.46$). The bulk of the participants were married (123 or 55.4%), the rest were single, 210 (94.6%) were Nigerian and 12 (5.4%) were non-Nigerian nationals.

Instruments

For the purpose of this, the researcher used the following instruments:

Section A: Demographic Information

This section consists of the demographic variables of the respondents, such as gender, age, marital status, and nationality.

Section B: Beck's Depression Inventory (BDI)

To determine the level of depression of the respondents, the Beck's Depression Inventory which was developed by Beck (1972) and validated among Nigerians by Adekambi (1986), Uzoka (1982), Osinowo (1998), Awaritefe (1988), Akinnawo (1993) was adopted. The scale is comprised of 21 questions with alternative choice statements ranging from 0 to 1a to 2a, 2b, and 3 that respondents selected the statement which best described their recent/immediate feelings. The total scores obtained for each respondent were added up for the 21 items, with a mean of $M = 37.31$ ($SD = 9.88$) for the study. A score above the mean would represent a high level of depression; a score below the mean would represent a low level of depression. The instrument has been reported to have split-half reliability of 0.78 and 0.93, and a mean instrument coefficient alpha of 0.87 (Beck, 1992; Steer, Beck, & Garrison, 1985). The scale was tested for face validity and internal consistency on a pilot sample of 35 Bakassi returnees, and was found to have a high internal consistency (Cronbach's $\alpha = 0.90$; split-half $\alpha = 0.85$; Part I, Q1–Q11 = 0.88; Part II, Q12–Q21 = 0.74).

Section C: Social Support Scale (SSS)

The Social Support Scale developed by (Udofia, 2007) was used to assess the level of perceived social support of the respondents. The scale has 17 items that are rated on a 5-point Likert-type scale ranging from Strongly Agree = 5 points to Strongly Disagree = 1 point. Items 1, 2, 3, 6, 9, 10, 13, and 16 were reverse scored. The scores were added together for each respondent on the 17 items and the study mean was $M = 49.01$ ($SD = 19.01$). High scores on the social support scale mean that the level of social support is high, and low scores mean that the level of social support is low. The instrument was found to be highly reliable with Cronbach's alpha of 0.87 by Udofia (2007) and it is also established to have high content, face and inter-rater validities. The scale was subjected to a pilot test in this study, and good internal consistency was obtained, with Cronbach's alpha reliability of Part I = 0.78 and Part II = 0.80, and split-half reliability of Part I (Q1–Q9) = 0.79, and Part II (Q10–Q17) = 0.80.

Section D: Health Locus of Control Scale (HLOC)

To assess respondents' beliefs about control over health outcomes the Health Locus of Control scale was used, developed by Wallston, and Wallston (1978). The scale is 11 items with responses on a 6-point likely scale ranging from 1 = strongly disagree, 2 = disagree, 3 = moderately disagree, 4 = mildly agree, 5 = agree, 6 = strongly agree. Items 1, 2, 8, 10 and 11 were reverse scored (i.e. added up by subtracting them from 7) prior to being added to items 3–7. The total score for each respondent was summed over the 11 items, giving a mean

for the study of $M = 33.28$ ($SD = 4.52$). The scores higher than the mean represent a strong external health locus of control and those lower than the mean represent a strong internal health locus of control. The original author of the scale reported an internal consistency between Cronbach's alpha 0.42 and alpha 0.72. In this study, the scale was pilot tested and found to have a Cronbach's alpha reliability coefficient of 0.81 and a split-half reliability coefficient of $r = 0.84$ (Part I: Q1-Q6 = 0.64, Part II: Q7-Q11 = 0.70).

Section E: Self-Concept Scale (SCS)

The self-concept scale developed by Ezeilo (1988) was used to measure the self-concept of the respondents in terms of self-perceived and self-evaluative aspects of their self-concept. The scale contains 54 items each of which is rated on a 7-point semantic differential format, with the respondents rating their own self-perception as very closely related to one of two bipolar adjectives, quite closely related, slightly related, to the neutral point between both sides of the scale. A very closely related response to a positively worded item will be scored 7; a very closely related response to a negatively worded item will be reverse scored. The original instrument had a reliability coefficient of 0.70 reported by Ezeilo (1988). To ensure reliability of the scale, it was subjected to a pilot test and it showed high internal consistency with a Cronbach's alpha reliability coefficient of 0.67, and split-half reliability of Part I (Q1–Q27) = 0.81 and Part II (Q27–Q54) = 0.80. The validity of the 29 items during the pilot testing was done by item-total correlation, and these items were deleted if the item-total correlation was less than 0.30, resulting in 25 items retained for the main study. The scores from the retained items were added up for each respondent and a study mean (M) was calculated at 94.15 ($SD = 20.58$). A score above the mean represents a high or positive self-concept and a score below the mean represents a low or negative self-concept.

Procedure

The study was conducted out in two phases. A pilot study was carried out with 35 Bakassi returnees in Ibesikpo Asutan Local Government Area, from which all the instruments were revalidated, and 35 out of 40 questionnaires received were analysed. The researcher and trained assistants, after obtaining the letter of consent from the Department of Psychology, University of Ibadan and permission from camp authorities, proceeded for the second stage of the research to the Eket and Ibiono Ibom camps. The questionnaires were circulated in 3 weeks with a block by block method to cover the camps orderly. For those who were unable to read and write, the research team read the items and correctly recorded the participant's answers. Data screening revealed that 222 valid questionnaires were retained for analysis and anonymity and confidentiality was guaranteed to all participants in advance of completing the questionnaire.

Data Analysis

The data were analysed using the Statistical Package for the Social Sciences (SPSS), Version 23. Both descriptive and inferential statistics were employed. Participants' demographic characteristics were summarised using frequency distributions and percentages, while means and standard deviations were used to describe the study variables. Cut-off scores were also determined to classify participants into relevant categories on each study variable. During the pilot study, the internal consistency reliability of the instruments was assessed using Cronbach's alpha, while the split-half reliability was examined using the Spearman–Brown coefficient. Item-total correlations were also computed to assess the contribution of individual items to the respective scales. Pearson's product-moment correlation matrix was generated to examine the relationships among the study variables. A 3-way analysis of variance (ANOVA) was conducted to test the main effects (H_1 – H_3) and interaction effects of the independent variables on the dependent variable. All seven hypotheses were tested at the 0.05 level of significance.

RESULTS

The results presented in Table 1 was used to demonstrate evidence of inter-correlation among all variables in this study.

Table 1: Summary of Inter-Correlation of all the Variables in the Study

Variable	Gender	Age	Nationality	Marital Status	Depression	Social Support	Health Locus of Control	Self-concept
Gender	-							
Age	-0.093	-						
Nationality	0.092	0.007	-					
Marital Status	-0.005	-0.605**	0.066	-				
Depression	0.131	0.420**	0.106	0.319**	-			
Social Support	0.204**	-0.125	0.093	0.138*	-0.387**	-		
HLOC	-0.012	0.019	-0.002	-0.028	0.049	-0.122	-	
Self-Concept	-0.064	-0.227**	-0.131	0.106	-0.524**	0.347**	-0.121	-

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

The result shows that there is a significant and positive relationship between gender and social support ($r = 0.20$; $p < .01$). The result also revealed that age significantly and negatively correlated with marital status ($r = -0.61$; $p < .01$); self-concept ($r = -0.23$; $p < .01$) and positively correlated with depression ($r = 0.42$; $p < .01$). Marital status significantly and negatively correlated with depression ($r = -0.32$; $p < .01$); and positively with social support ($r = 0.14$; $p < .05$). Depression also significantly and negatively correlated with social support ($r = -0.39$; $p < .01$); self-concept ($r = -0.52$; $p < .01$). Social support significantly and positively correlated with self-concept ($r = 0.35$; $p < .01$).

Hypotheses Testing

Descriptive statistics, including the means, standard deviations, and variances, were computed for the relevant groups and are presented to describe the distribution of depression scores across the cells of the $2 \times 2 \times 2$ factorial design and to complement the subsequent inferential ANOVA results.

Table 2 was used to show the summary of mean (M), and standard deviation (SD) of social support, health locus of control and self-concept as variables influencing manifestation of depression among IDPs.

Table 2: Descriptive Statistics for Depression by Levels of Social Support, Health Locus of Control, and Self-Concept

Variable	N	M	SD	Variance	Effect sizes (Cohen's 'd')
Depression (DV)					
Social support					
Low social support	108	40.38	8.16	66.59	0.63
High social support	114	34.4	10.51	110.46	
Health Locus of Control					
Internal	121	36.83	10.88	118.37	-0.11
External	101	37.89	8.55	73.1	
Self-concept					
Low self-concept	120	40.74	7.97	63.36	0.81
High self-concept	102	33.3	10.42	108.58	

Note. $N = 222$. n represents the number of participants in each subgroup; M = mean; SD = standard deviation.

Table 2 presents the descriptive summary of mean, standard deviation and variance of depression scores across categories of social support, health locus of control and self-concept among Bakassi returnees. Overall, the results show meaningful differences in the level of depression across the categories of the three variables

For social support, Bakassi returnees with low social support ($N = 108$) recorded a higher mean depression score ($M = 40.38$, $SD = 8.16$) than those with high social support ($n = 114$; $M = 34.40$, $SD = 10.51$). The mean difference of 5.98 points suggests that inadequate social support is associated with greater manifestation of depression. This pattern may reflect the importance of emotional, practical and interpersonal resources in helping displaced persons cope with the losses, uncertainty and disruptions associated with displacement. The greater variability among those with high social support, however, indicates that social support does not uniformly protect all IDPs from depression, as individual experiences of displacement and other psychosocial factors may differ considerably.

Regarding health locus of control, participants with an external orientation ($n = 101$) had a slightly higher mean depression score ($M = 37.89$, $SD = 8.55$) than those with an internal orientation ($n = 121$; $M = 36.83$, $SD = 10.88$). The relatively small mean difference of 1.06 points suggests only a modest descriptive difference between the two groups. Nevertheless, the direction of the finding may imply that perceiving health outcomes as being controlled by external forces such as chance, fate or powerful others could be associated with somewhat greater depressive symptoms, whereas an internal sense of control may foster personal agency and active coping. The relatively high variability within the internal group further suggests that personal control alone may not be sufficient to protect Bakassi returnees from depression in the face of severe environmental stressors.

For self-concept, the largest mean difference was observed. Bakassi returnees with low self-concept ($n = 120$) recorded a substantially higher depression score ($M = 40.74$, $SD = 7.97$) than those with high self-concept ($n = 102$; $M = 33.30$, $SD = 10.42$), representing a mean difference of 7.44 points. This finding suggests that a less favourable perception of oneself is associated with greater depressive manifestation. Displacement may undermine established identities, roles, competence and personal worth, thereby creating conditions in which negative self-evaluations can become particularly salient. Conversely, a positive self-concept may provide an important psychological resource that helps individuals maintain a sense of worth and competence despite adverse circumstances.

Comparatively, self-concept produced the largest mean separation (7.44 points), followed by social support (5.98 points), while health locus of control produced the smallest difference (1.06 points). This descriptive pattern suggests that self-perception and interpersonal support may be particularly important in understanding depression among the Bakassi returnees studied, while health locus of control appears to show a comparatively weaker group difference.

Furthermore, differences between the reported group means were examined, with Cohen's d used, where applicable, to estimate the magnitude of the mean differences. Overall, the table reveals a consistent pattern in which high social support and high self-concept are associated with lower mean depression scores, whereas an external health locus of control is associated with a slightly higher mean depression score. These findings provide preliminary descriptive support for the proposed relationships among the variables and suggest that depression among Bakassi returnees may be associated with both interpersonal resources and individual psychological characteristics.

The seven hypotheses (H_1 – H_7) formulated in the study were subjected to empirical testing using a three-way analysis of variance (3-way ANOVA). The results of the analyses, including the main effects and interaction effects of the independent variables on the dependent variable, are presented in Table 3.

Table 3: Summary of 2x2x2 ANOVA showing the Main and Interaction effects of Social Support, Health Locus of Control and Self -Concept on Manifestation of Depression among IDPs ($N = 222$)

Source	SS	df	MS	F	p	Partial η^2
Factor A	1,168.26	1	1,168.26	14.82	< .001	0.065

Factor B	9.8	1	9.8	0.12	0.725	0.001
Factor C	2,052.28	1	2,052.28	26.03	< .001	0.108
A x B	64.23	1	64.23	0.81	0.368	0.004
A x C	253.93	1	253.93	3.22	0.074	0.015
B x C	253.58	1	253.58	3.22	0.074	0.015
A x B x C	12.7	1	12.7	0.16	0.689	0.001
Error	16,871.76	214	78.84	-	-	-

Key: Factor A= Social Support; Factor B= Health Locus of Control; Factor C= Self-Concept

Note. SS = Sum of Squares; MS = Mean Square; F = F-ratio; p = probability value; Partial η^2 = partial eta squared. Effect sizes are calculated as $SS_{\text{effect}} / (SS_{\text{effect}} + SS_{\text{error}})$.

The 3-way ANOVA indicates that the overall model was statistically significant $F(7,214) = 6.71, p < .001$, partial $\eta^2 = .184$, indicating that the combined predictors accounted for a substantial proportion of the variance in depression scores.

There was a significant main effect of social support, $F(1, 214) = 14.82, p < .001$, partial $\eta^2 = .065$. This indicates that depression scores differed significantly between IDPs with low and high levels of social support. Consistent with the descriptive results, Bakassi returnees with low social support reported higher depression scores than those with high social support. The effect size was moderate, with social support accounting for approximately 6.5% of the partial variance in depression.

There was no significant main effect of health of control, $F(1, 214) = 0.12, p = .725$, partial $\eta^2 = .001$. Thus, internal versus external health locus of control did not independently differentiate depression scores among the Bakassi returnees. The effect size was negligible.

In contrast, self-concept produced a significant main effect, $F(1, 214) = 26.03, p < .001$, partial $\eta^2 = .108$. Bakassi returnees with low self-concept had significantly higher depression scores than those with high self-concept. The effect size was moderate, with self-concept explaining approximately 10.8% of the partial variance in depression.

The Social Support x Health Locus of Control interaction was not significant, $F(1, 214) = 0.81, p = .368$, partial $\eta^2 = .004$. This suggests that the relationship between social support and depression did not significantly depend on whether Bakassi returnees had an internal or external health locus of control.

Similarly, the Social Support x Self-Concept interaction did not reach the conventional .05 significance, $F(1, 214) = 3.22, p = .074$, partial $\eta^2 = .015$. Although the effect approached significance and accounted for about 1.5% of the partial variance, it is not statistically significant at $\alpha = .05$. Therefore, the interaction is interpreted as non-significant.

The Health Locus of Control x Self-Concept interaction was also not significant, $F(1, 214) = 3.22, p = .074$, partial $\eta^2 = .015$. Thus, the effect of self-concept on depression did not significantly vary according to health locus of control.

Consequently, the strongest independent predictor in the factorial analysis is therefore self-concept (partial $\eta^2 = .108$), followed by social support (partial $\eta^2 = .065$), whereas health locus of control has a negligible independent effect.

Finally, the three-way interaction among social support, health locus of control and self-concept was not significant, $F(1, 214) = 0.16, p = .689$, partial $\eta^2 = .001$. This indicates that the combined influence of social support and self-concept on depression did not significantly depend on the level of health locus of control.

DISCUSSION OF FINDINGS

The present study examined the independent and interactive effects of social support, health locus of control and self-concept on depression among Bakassi returnees in Akwa Ibom State, Nigeria. The result showed that social support and self-concept had significant independent effects on depression, whereas health locus of control did not. None of the two-way or three-way interaction effects reached the conventional .05 level of statistical significance. The overall factorial model was statistically significant, indicating that the three psychosocial factors, considered collectively, accounted for a meaningful proportion of the variability in depression. The findings are discussed in relation to the hypotheses and relevant empirical literature.

The first hypothesis, which stated that social support will significantly be associated with the manifestation of depression among Bakassi returnees, was supported. The significant main effect of social support indicates that depression scores differed significantly according to the level of social support. Consistent with the descriptive findings, Bakassi returnees with low social support reported higher depression scores than those with high social support. The partial η^2 of .065 indicates a meaningful, though not dominant, effect, suggesting that social support accounted for approximately 6.5% of the variance in depression after accounting for the other effects in the factorial model. This finding is consistent with the social support buffering perspective of Cohen and Wills (1985), which proposes that supportive interpersonal relationships can reduce the psychological consequences of stressful life experiences by providing emotional, informational and instrumental resources. Such resources may be particularly important for displaced populations because displacement commonly involves the disruption of family networks, friendships, community ties, livelihoods and established social roles. For Bakassi returnees, therefore, access to supportive relationships may provide reassurance, belonging, practical assistance and opportunities to share stressful experiences, thereby reducing vulnerability to depressive symptoms.

The finding is also broadly consistent with evidence from displaced populations. Gichunge *et al.* (2020), for example, reported that social support was relevant to mental health and well-being among IDPs in Turkana, Kenya, while Bekeko *et al.* (2025) identified limited social support as one of the social circumstances associated with poor mental health among IDPs in Ethiopia. Similarly, Ugbe *et al.* (2022), in their study of internally displaced adults in Ogoja, Cross River State, Nigeria, reported substantial psychological distress among IDPs and highlighted the relevance of social support to psychological outcomes. Although the methodological approaches and specific variables examined in these studies differ from those of the present investigation, their findings reinforce the importance of the social environment in understanding psychological adjustment following displacement.

The finding may also be understood in the context of the social disruption associated with displacement. Timothy *et al.* (2025) reported difficulties relating to social connection, belonging and the restoration of normal life among people affected by crisis-related displacement in Nigeria. Such experiences can deprive displaced persons of established sources of emotional and instrumental support. Nevertheless, an alternative explanation should be acknowledged. Individuals experiencing fewer depressive symptoms may also be more capable of seeking, maintaining and perceiving social support, whereas individuals with depression may withdraw socially or perceive available support less positively. Thus, because the present study employed a cross-sectional design, the finding demonstrates an association rather than establishing that inadequate social support causes depression. Despite this qualification, the result provides empirical support for the first hypothesis and suggests that strengthening social connectedness may be relevant to psychological well-being among displaced populations.

The second hypothesis, which stated that Health locus of control will be significantly associated with the manifestation of depression among Bakassi returnees, was not supported. The main effect of health locus of control was not statistically significant. The virtually zero effect size indicates that internal versus external health locus of control explained negligible unique variation in depression within this sample.

The finding contrasts with the general theoretical expectation that individuals who perceive their health outcomes as being controlled by themselves may experience greater personal agency, whereas those who attribute outcomes to chance, powerful others or external circumstances may experience greater helplessness.

Some empirical evidence has linked locus of control with psychological distress. For example, Couto and Baptista (2023) reported an association between locus of control and psychopathological symptoms, including depression. However, the present finding suggests that this relationship may not operate uniformly across populations and contexts.

One plausible explanation is the exceptional degree of external constraint associated with forced displacement. For Bakassi returnees, major determinants of their circumstances- including displacement itself, loss of homes, disruption of livelihoods, insecurity, dependence on institutional assistance and uncertainty about the future- may genuinely lie outside individual control. Consequently, an external orientation regarding health may not necessarily translate into greater depression when many important life circumstances are objectively externally determined. In such an environment, believing that powerful external forces influence one's circumstances may sometimes represent a realistic appraisal rather than a maladaptive cognitive orientation.

The finding is also compatible with evidence that the relationship between control beliefs and psychological distress can be context-dependent. Tremolada *et al.* (2020), for instance, demonstrated that relationships between dimensions of health control and depressive symptoms are not necessarily straightforward across stressful circumstances. Thus, the absence of a significant main effect in the present study does not imply that locus of control is universally unrelated to depression. Rather, it suggests that health locus of control, as operationalised in this study, did not independently differentiate depression among these Bakassi returnees. Other dimensions of perceived control, such as perceived control over livelihood, safety, displacement circumstances or future prospects, might have been more relevant but were not examined.

The third hypothesis, which stated self-concept will be significantly and negatively be associated with the manifestation of depression among Bakassi returnees was supported. Self-concept produced a significant main effect on depression. Bakassi returnees with low self-concept reported higher depression scores than those with high self-concept. Of the three independent factors examined, self-concept produced the largest effect, accounting for approximately 10.8% of the partial variance in depression.

This finding is consistent with literature linking negative self-evaluations with depressive symptoms. Yeo *et al.* (2023), in their synthesis of research on self-related psychological processes, reported consistent associations between negative aspects of selfhood and depression and noted that the relationship may be bidirectional. Similarly, Zhang *et al.* (2022) found that self-concept and social support were associated with depression, although their study examined a different population and psychosocial context.

The relevance of self-concept may be particularly pronounced among displaced persons. Forced displacement can disrupt occupational roles, economic independence, family responsibilities, social status, community membership and expectations about the future. These disruptions may challenge previously established perceptions of competence, usefulness, identity and personal worth. Consequently, individuals who already possess a negative self-concept may be particularly vulnerable to depressive symptoms when displacement further undermines their sense of agency and social value.

However, the present finding should not be interpreted as evidence that low self-concept necessarily causes depression. Depression itself can produce negative cognitive biases, feelings of worthlessness and negative self-evaluation. Thus, the association may operate in both directions: negative self-concept may increase vulnerability to depression, while depressive symptoms may subsequently reinforce negative self-perceptions. This alternative explanation is especially important because the cross-sectional design does not permit determination of temporal precedence. Nevertheless, the relatively larger effect size observed for self-concept indicates that it was an important correlate of depression in this sample and provides support for the third hypothesis.

The fourth hypothesis proposed that social support would significantly have interaction with health locus of control in relation to the manifestation of depression among Bakassi returnees. This hypothesis was not supported, as the Social Support $\times$ Health Locus of Control interaction was not statistically significant. This finding indicates that the difference in depression scores between Bakassi returnees with low and high levels of social support did not significantly depend on whether they had an internal or external health locus of

control. The significant independent effect of social support is consistent with findings from displacement contexts suggesting that interpersonal resources are important for psychological well-being. For instance, Gichunge *et al.* (2020) and Bekeko *et al.* (2025) have demonstrated that social and relational factors are relevant to understanding the mental health of Bakassi returnees. However, the absence of a significant interaction suggests that the influence of social support on depression does not vary systematically according to health locus of control. Thus, the beneficial role of social support appears to operate relatively independently of whether Bakassi returnees tend to attribute health outcomes to internal or external sources of control.

The result can be understood alongside the nonsignificant main effect of health locus of control. Since health locus of control did not independently differentiate depression and did not significantly alter the relationship between social support and depression, the findings provide little evidence that control beliefs condition the psychological relevance of social support among these Bakassi returnees. One possible explanation is that social support represents a more immediate interpersonal resource, whereas health locus of control reflects a more general cognitive belief about control over health outcomes. In a displacement context characterised by substantial external constraints, immediate access to supportive relationships may therefore be more psychologically consequential than individual differences in health-control beliefs.

At the same time, the absence of an interaction should not be interpreted as proof that the two variables can never interact. The small effect size (partial $\eta^2 = .004$) suggests that any conditional effect was very limited in this sample. A larger sample, alternative measures of perceived control or examination of specific forms of social support could potentially produce different results.

The fifth hypothesis proposed social support will significantly have interaction effect with self-concept in relation to the manifestation of depression among Bakassi returnees. This hypothesis was not supported at the conventional .05 significance level. Although, the Social Support $\times$ Self-Concept interaction produced the probability value which exceeded .05. It would be inappropriate to conclude that a statistically significant interaction existed. The result does, however, warrant cautious interpretation. The effect size of .015 indicates a small interaction effect, and the p value of .074 suggests that the observed pattern was not entirely trivial, although it did not meet the predetermined criterion for statistical significance. Consequently, the result may be described as a small, non-significant interaction that approached the conventional significance threshold, rather than as evidence that social support and self-concept interact significantly.

This finding is particularly interesting because both variables independently demonstrated significant relationships with depression. This contrasted Zhang *et al.* (2022) who identified social support and self-concept as important components of psychosocial processes associated with depression. However, the present study does not provide sufficient statistical evidence to conclude that the effect of social support on depression changes according to self-concept, or vice versa.

Several explanations are possible. First, social support and self-concept may influence depression through largely additive rather than interactive mechanisms. That is, each factor may contribute independently to psychological adjustment without one substantially modifying the effect of the other. Second, the small observed interaction may reflect limited statistical power to detect a modest conditional effect. Third, differences in the quality, source and perceived adequacy of social support may have obscured an interaction that would be detectable if emotional, instrumental, family and community support were examined separately. Finally, individuals with low self-concept may differ in how they perceive or utilise available support, but such processes cannot be established from the present cross-sectional data. Thus, the fifth hypothesis was not supported, although the observed small effect may justify further investigation.

The sixth hypothesis stated that health locus of control will significantly have interaction with self-concept in relation the manifestation of depression among Bakassi returnees. This hypothesis was not supported. The Health Locus of Control $\times$ Self-Concept interaction was nonsignificant.

The finding indicates that the relationship between self-concept and depression did not significantly differ according to whether participants possessed an internal or external health locus of control. Importantly, self-concept retained a significant independent main effect whereas health locus of control did not. This pattern

suggests that self-concept was associated with depression relatively independently of health-control orientation.

The finding is broadly consistent with the literature showing a robust association between negative self-evaluations and depressive symptoms. Yeo *et al.* (2023) identified a consistent relationship between negative self-related processes and depression, while Zhang *et al.* (2022) reported significant relationships involving self-concept and depression. However, the present result extends those observations by indicating that the association between self-concept and depression was not significantly conditioned by health locus of control in this displaced population.

An alternative explanation is that the measure of health locus of control may not have captured the type of control beliefs most relevant to the lived experiences of the participants. For example, control over health outcomes may differ from perceived control over displacement, economic security, family welfare or future opportunities. It is therefore possible that more context-specific measures of perceived control would interact differently with self-concept. The finding nevertheless reinforces the conclusion that self-concept had a more consistent relationship with depression than health locus of control in the present sample.

The seventh hypothesis proposed that social support, health locus of control, and self-concept will have interaction effect in relation to the manifestation of depression among Bakassi returnees. This hypothesis was not supported. The three-way interaction was not statistically significant. The extremely small effect size indicates that virtually no additional variation in depression was explained by the combined three-way interaction.

This result suggests that the relationship between social support and self-concept did not significantly vary as a function of health locus of control. More broadly, the findings do not support a complex conditional model in which the psychological benefits associated with social support and positive self-concept depend jointly on health-control beliefs. Rather, the results point towards a simpler pattern in which social support and self-concept are independently associated with depression.

The absence of the three-way interaction is theoretically informative. It suggests that although several psychosocial factors may be relevant to depression among Bakassi returnees, their effects should not automatically be assumed to operate through increasingly complex interaction mechanisms. In the present study, the strongest evidence was for the independent contributions of social support and self-concept. Health locus of control did not significantly contribute independently or as part of any tested interaction. This does not invalidate the theoretical relevance of control beliefs; instead, it suggests that their importance may depend on other contextual or methodological conditions.

Taken together, the findings provide stronger evidence for independent psychosocial effects than for interaction effects. Social support and self-concept were significant independent correlates of depression, whereas health locus of control was not. Furthermore, none of the Social Support $\times$ Health Locus of Control, Social Support $\times$ Self-Concept, Health Locus of Control $\times$ Self-Concept, or three-way interactions attained statistical significance. Therefore, the principal conclusion is that depression among the Bakassi returnees in this study was more strongly differentiated by the availability of social support and the quality of self-concept than by health locus of control or combinations of these variables.

The finding that self-concept produced the largest partial effect ($\eta^2p = .108$), followed by social support ($\eta^2p = .065$), suggests that both intrapersonal and interpersonal resources are important in understanding depression in this population. This is theoretically plausible because displacement can simultaneously threaten an individual's social connectedness and sense of personal identity and worth. However, the findings should not be interpreted as establishing causal relationships. Depression may itself influence how individuals perceive their social support, evaluate themselves and interpret their degree of control. Other factors not included in the model- such as duration of displacement, severity of exposure to violence, economic hardship, physical health, family separation, camp conditions, employment status and access to mental-health services- may also account for part of the observed variation in depression.

Overall, the study therefore supports a multifactorial but predominantly additive interpretation of depression among the Bakassi returnees. Social support and self-concept emerged as significant independent psychosocial correlates, whereas health locus of control showed negligible explanatory value. The nonsignificant interaction effects further suggest that the contribution of social support and self-concept was not substantially dependent on the levels of the other psychosocial variables examined. These findings accentuate the importance of interventions that strengthen interpersonal support systems and promote positive self-perceptions among displaced persons, while also indicating that future research should examine more context-specific forms of perceived control and employ longitudinal designs to clarify the direction and mechanisms of these relationships.

CONCLUSION

This study examined the independent and interacting effect of social support, health locus of control, and self-concept on the experience of depression among Bakassi returnees who have been resettled in Eket and Ibiono Ibom Local Government Areas of Akwa Ibom State, Nigeria. It has been found that social support and self-concept were significant psychosocial predictors of depression experienced by Bakassi returnees.

Participants with low level of social support experienced higher levels of depression compared to their counterparts with high levels of social support. It means that social support is an important protective factor that reduces the adverse psychological consequences associated with displacement. At the same time, depression was also significantly influenced by self-concept; respondents with poor self-concept experienced more depressive symptoms. These results indicate that not only social and environmental factors, but also self-concept can help in maintaining psychological well-being.

However, there was no significant influence of health locus of control on depression, neither as a variable nor in interactions with other psychosocial variables. There is also an indication that there is a significant interaction between social support and self-concept. The two factors seem to have some level of interaction such that when they work together, they impact the emergence of depression. The implication is that the buffering role of social support can be made more effective in cases where the person has a positive self-concept.

The study therefore shows that the psychosocial determinants of depression among the Bakassi returnees include social support and self-concept, whereas health locus of control was not a significant determinant. It means that these two determinants play a central role in explaining depression among internally displaced populations and can form part of the empirical base on which interventions aimed at improving the situation of the population are developed.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

1. Both government and non-governmental organizations should give priority to provision of constant material and emotional support, such as relief materials, cash transfers and peer-support programs to build the social support systems of Bakassi returnees.
2. Administrators and experts in the field of mental well-being of the affected individuals should introduce regular mental evaluation and intervention program in Bakassi returnees' camps, with special focus on identification and treatment of negative self-concept of residents.
3. Cognitive Behavioural Therapy (CBT), which has proved its efficiency in changing the negative and hopeless ways of thinking associated with depression, should be provided in returnees camps or nearby locations as the initial mental intervention program.
4. Skill acquisition and livelihood development programs should be developed to give Bakassi returnees the chance to feel productive and self-reliant.

5. Policymakers should make sure that the welfare and well-being of Bakassi returnees are included in national policy of displacement and resettlement.
6. Due to the relatively limited value observed for locus of control regarding health in this study, interventions intended for this population should focus on providing social support and self-concept rather than interventions geared towards modifying health locus of control, in view of additional research.
7. Future studies will require extending the scope of this research to include Bakassi returnees resettled in other states, and other Nigerian returnees populations displaced through insurgency and banditry, in order to verify whether or not the current pattern of results, especially the limited relevance of health locus of control, can be extended to other samples.

LIMITATIONS AND SUGGESTIONS FOR FURTHER STUDIES

This study has several limitations that should be considered when interpreting its findings. First, the sample comprised only Bakassi returnees resettled in Akwa Ibom State; therefore, the findings should not be generalized to other Bakassi returnees or Nigerian s displaced by insurgency or banditry without further research. Second, difficulties in accessing the study population limited the sample size. Third, the cross-sectional design was appropriate for this exploratory study but does not permit causal inferences. Future studies should therefore adopt longitudinal designs to establish the temporal relationships among the variables. Finally, the use of self-report questionnaires, including researcher-assisted administration for participants who could not read or write, may have introduced response bias. Future research should consider combining quantitative and qualitative methods to provide a more comprehensive understanding of the factors associated with depression among returnees.

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