Research Articles

Personal Factors as Predictors of Psychological Distress among Internally Displaced Persons

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Abstract

Displacement as a result of conflict or insurgency creates a permanent scar on the survivor with physical, psychological and social sequels; however personal factors play a significant role. Therefore, this study investigated personal factors as predictors of psychological distress among internally displaced persons in Maiduguri, Nigeria. In this cross-sectional study of survey type, the multi-stage sampling techniques were employed, and cluster sampling techniques were used to select two Internally Displaced Persons’ (IDPs) camps. Two hundred and one IDPs residing in the camps were selected using purposive sampling techniques. Their age ranged between 18 and 65 years (M = 37.2; SD = 1.6). The results of Multiple Regression analysis showed that personality traits and a demographic factor (sex) jointly predicted psychological distress among IDPs. The variables jointly accounted for 22% variation $R^2 = .215$ on psychological distress. Regarding the individual
contribution, neuroticism $\beta = .166; t = 2.34; p < .05$, conscientiousness $\beta = -.233; t = -3.36; p < .05$, openness to experience $\beta = -.169; t = -2.45; p < .05$ and sex $\beta = -.352; t = 5.17; p < .05$ made a significant prediction on IDPs psychological disturbances. The findings of this study revealed that the personal characteristics of an individual had a predictive influence on psychological distress among IDPs in Maiduguri, Nigeria.

Keywords: Internally displaced persons, Maiduguri, personality, psychological distress

Theoretical background

Internally displaced persons (IDP) are a group of people who flee their communities due to (or to avoid) crisis or natural disaster but still reside within their country’s territory. Currently, there are 20 million IDPs worldwide; women and children were the majority 70% and 80% respectively, typically reside in underdeveloped countries (International Displacement Monitoring Centre “IDMC”, 2014; United Nations High Commissioner of Refugees “UNHCR”, 2011).

In North Eastern Nigeria, the ongoing crisis has displaced many to neighboring states and countries while many have lost their life. The crisis has made 1.5 million Nigerians from North Eastern geopolitical zone flee to perceived safer parts of the country and neighboring countries, about 13,000 - 17, 500 death was also recorded (International Displacement Monitoring Centre “IDMC”, 2014); Borno state was the most affected state in north-eastern Nigeria, with 1,439, 953 IDPs, followed by Adamawa state, with 178,977 IDPs, and Yobe state with 136,662 IDPs; in Taraba, Bauchi and Gombe states, 67,111 IDPs, 61,265 IDPs, and 34,540 IDPs were recorded respectively (International Organisational for Migration-Displaced Tracking Matrix, 2018).

In a time of crisis, victims experienced a lot of distress which could be physical or psychological. Psychological distress is a state of mind in which an individual’s manifest
symptoms of psychopathology as evidenced by the loss of interest; sadness; hopelessness, restlessness; feeling tense and so on (Mirowsky & Ross, 2002). These symptoms may be associated with depression, anxiety, somatization, and stress which is likely to vary across cultures (Kleinman, 1991). Reaction to psychological distress depends on personal factors of an individual such as personality traits and demographic characteristics.

Personality traits play a significant role in human behavior. Personality disposition is the models that distinguish one person from another as evidenced by the person behaviours and perception which is relatively stable over time (Phares, 1991). Personality traits are measured on different dimensions, but five-factor model (Big five) has been found to be widely researched with strong empirical support (Chapman et al., 2007b), the model is in five dimensions which comprise neuroticism, extraversion, openness, agreeableness, and conscientiousness.

Neuroticism is the predisposition to express unhelpful and negative feelings and perception (such as nervousness, angry hostility, despair, and impulsivity); being extraverted is the disposition toward energetic activity and sociability (kindness, companionability, boldness, enthusiasm seeking, and good emotion); also being open is the ability to be receptive and innovative to new ideas, and esthetic tendencies (such as fantasy, feelings, and values); agreeableness is the affinity to be compliance, tender-mindedness, truthfulness, and reserve; lastly, being conscientious is predisposition that involves meticulousness, self-control, proficiency, and trustworthiness (Chapman et al., 2007b; Chapman et al., 2007a). Therefore, health consciousness of an individual is influenced by personality traits (Kikuchi et al., 1999), and this explained why the reaction to psychological distress among IDPs varies.

In a study conducted in India, Shaheen et al. (2014) found a significant negative relationship between Extraversion, Openness, Agreeableness and Conscientiousness dimensions of personality traits and emotional distress. Similarly, Jylha and Isometsa (2006) discovered a negative correlation between extraversion and symptoms of psychopathologies (depression and anxiety). Use of humor as a coping method under stressful situation, and appraising a severely stressful situation as insignificant was common among individuals who scored high on openness to experience measure; based on the above assertion, there was no connection between openness to experience and depression (Bakker et al., 2006; Vearing & Mak, 2007), likewise, no direct relationship was reported between agreeableness, conscientiousness and psychological distress (Vearing & Mak, 2007).
Furthermore, previous studies have implicated neuroticism that increased levels of negative emotional states lead to emotional disorders like depression (Shaheen et al., 2014; Tyssen et al., 2001). Therefore, neuroticism traits are a significant predictor of depression (Tyssen et al., 2001). In another study, a positive relationship was found linking the neuroticism dimension of personality and psychological suffering among Aligarh Muslim University students in India (Shaheen et al., 2014).

Personal factors play a significant role in developing and coping with psychological distress among IDPs. But no evidence has been found to prove the predictive role of these variables, few ones that exist only looked at the connection linking personality traits and mental distress (Bakker et al., 2006; Miller et al., 1999; Van den Berg & Feij, 2003; Vearing & Mak, 2007), and most of this study were conducted among students and in developed countries (Shaheen et al., 2014). In a study conducted in North Western Nigeria among IDPs, Sheikh et al. (2016) only focused on the prevalence of some of the psychological distress such as sudden change in mood, hyperarousal, post-traumatic stress disorder, loss of interest in opposite sex, sexual exploitation and rape, meanwhile the underlie predisposing and precipitating factors such as personality traits and demographic factor to this psychopathology were neglected.

This study therefore, examines the predictive role of personal factors on psychological distress among internally displaced persons in Maiduguri.

Based on the above reasons it is of necessity to test the hypothesis that: (i) personality traits (neuroticism, openness to experience, extraversion, conscientiousness, agreeableness), age, sex, and marital status will jointly and independently predict psychological distress among IDPs.

**Method**

**Design**

This study is a cross-sectional study, survey type. This research design is chosen because it allows for the use of questionnaires to collect data from a large sample with diverse socio-demographic characteristics.

**Setting**

Maiduguri Borno State hosts fifteen IDPs camps majorly within Maiduguri Metropolitan Council (MMC) and Jere LGAs of the state. The camps are: Government Girls College camp, Government College camp, Farm Centre camp, EYN/CAN Centre camp, Girls secondary School camp, Yerwa camp, Teachers Village camp, Bakassi camp, National Youth Service
Corp camp, Arabic Teachers College camp, MOGCOLIS camp, Sanda Kyarimi camp, Dalori camp, Fori SUBEB school camp, Gubio Road Housing Estate camp, among which this research intended to consider 5 camps for its questionnaire. For the purpose of this study, EYN/CAN Centre camp and Teachers Village camp were randomly selected, these two camps were strategically located and relatively far from each other, and the inhabitants were of a different culture, belief, and orientation.

Sample Size Determination

From a population of 713 IDPs in two selected camps in Maiduguri City, *Yamane (1967)*'s Formula known population (see Formula 1) was used to determine the sample size for this study.

$$n = \frac{N}{1 + N(e^2)}$$

Where:
- $n =$ Estimated sample size.
- $N =$ Total number of the IDPs
- $1 =$ Constant value
- $e =$ Estimated level of the confidence interval

$$n = \frac{713}{1 + 713 (0.05)^2}$$
$$n = \frac{713}{1 + 1.7825}$$
$$n = \frac{713}{3}$$
$$n = 238$$

Participants

Finally, 238 IDPs participated in the study, but due to incomplete responses 190 participants' responses were coded. Participant’s age range was between 16-25 years. Ages 16-25 years old were 24 (11.9%), 26-30 were 19 (9.5%), 31-35 were 19 (9.5%), 36-40 were 20 (10%), 41 years old and above were 108 (53.7%). Distribution of participants, according to sex, indicated that 104 (51.7%) were males and 86 (42.8%) were females. Distribution of respondents, according to marital status, showed 143 (71.1%) were married, 20 (10%) were single, 11 (5.4%) were divorced, 16 (8%) were widowed.
Sampling Techniques

Multi-stage sampling techniques were employed; cluster sampling techniques were used to select two Internally Displaced Persons (IDPs) camps; EYN/CAN Centre camp and Teachers Village camp. Two hundred and thirty eight (N = 238) IDPs residing in the camps were selected using purposive sampling techniques, but due to incomplete responses 190 questionnaires were finally analyzed. This technique was adopted because the participants must be relatively stable to participate in the study.

Instruments

The following instruments were adopted to gather information in this study.

Section A: focused on demographic variables.

Section B: Brief Five-Factor Personality Inventory (BFFPI) was developed by Gosling et al. (2003) to measure personality traits among the general population. The items are in a Likert response format, ranging from strongly disagree to strongly agree (1 – 5). Gosling et al. (2003) reported $\alpha = .88$. In the current study, the instrument had $\alpha = .78$.

Section C: Goldberg (1972) originally developed the General Health Questionnaire (GHQ) which was later revised by Goldberg and Williams (1988). It is used to appraise a person’s reaction to stressful situations. GHQ is a twelve (12) items measure which is scored on a 4-point Likert scale ranging 1 (Better than usual) to 4 (much more than usual). These items are further divided into four (4) groups according to A, B, C, and D respectfully. General health Questionnaire has shown to have good reliability; with Goldberg and Williams (1988) reporting a Cronbach’s alpha ranging from $\alpha = .77$ to .93. In the current study, the instrument had twelve (12) items; $\alpha = .75$.

Ethical Clearance

Ethical clearance was sought from both Borno state ministry of health, the ministry coordinates Borno state government activity in various IDPs camps within the state through State Emmagency Management Authority (SEMA), and National Emmagency Management Authority (NEMA), an agency that coordinates federal government activity within the camps after the protocol was found to be in substantial compliance with the Declaration of Helsinki for research in human subjects.

Procedure

Security clearance was sought from the military personnel at the entrance of the camps. The ethical clearance document was presented to the camps authorities, afterward, the
researchers were led to the tents of the IDPs where informed consent from the displaced persons was obtained and issues of confidentiality and privacy were discussed. Consequently, the questionnaires were administered and supports were given when necessary on the interpretation of the questionnaire into Hausa Language for the participants.

**Data Analysis**

The collected data were subjected to statistical analysis using the Statistical Package for the Social Scientists (SPSS) version 20.0. Pearson Product Moment Correlation (PPMC) analysis was used to ascertain the relationships among all variables of the study. Also, Multiple Regression Analysis was used to test for the independent and joint influence of personality traits on psychological distress among IDPs.

**Results**

In order to know the extent and direction of relationships among the study variables, Pearson Product Moment Correlation analysis was used to analyze the collected data. The results were presented in Table 1. Sex and marital status were coded as dummy variables for data presented in Table 1 and Table 2.

The results of the inter-correlations analysis in Table 1 show that psychological distress had a considerable positive correlation with neuroticism $r(199) = .126$, $p < .05$, this implies that psychological distress is positively correlated with neuroticism, the higher neurotic an IDPs the higher psychological distress experience. Conscientiousness negatively correlated with psychological distress $r(199) = - .188$, $p < .05$, this implies that the lower an IDPs conscientiousness the more prone to experience psychological distress. Openness to experience negatively correlated with psychological distress $r(199) = - .155$, $p < .05$, this implies that the more open to experience an IDPs, the lower the tendency to experience psychological distress. Sex difference had a significant relationship with psychological distress $r(199) = .335$, $p < .01$, this implies that being female or male had a relationship with psychological distress.
Table 1: Correlation Matrix showing the Mean, SD and the Relationships between psychological distress, dimensions of personality and demographic characteristics

| Variables                  | X    | SD    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|----------------------------|------|-------|------|------|------|------|------|------|------|------|------|------|
| Psychological Distress     | 47.46| 19.25 | -    |      |      |      |      |      |      |      |      |      |
| Neuroticism                | 10.46| 1.72  | .126*| -    |      |      |      |      |      |      |      |      |
| Extraversion               | 10.16| 1.67  | -0.62| .158*| -    |      |      |      |      |      |      |      |
| Conscientiousness          | 9.56 | 1.75  | -1.88*| .207*| .121*| -    |      |      |      |      |      |      |
| Openness to Experience     | 9.12 | 2.44  | -1.55*| -.130*| -1.22*| .152*| -    |      |      |      |      |      |
| Agreeableness              | 10.63| 6.84  | -0.16| -.175**| -0.83| -.116*| .054| -    |      |      |      |      |
| Sex                        | -    | -     | .335**| .130*| -.048| .120*| .045| .040| -    |      |      |      |
| Marital Status             | -    | -     | .081  | -.018| .043| -.109*| -.048| .175*| -    |      |      |      |
| Age                        | 32.04| 11.55 | -.052| -.107*| -.003| .115*| .111*| -.081| -.046| -.132*| -    |      |

Note: **p < .01 *p < .05, N=190, Coded Variables Sex: Male=1, Female=2, Marital status: Single=1, Married=2, Divorced=3, Widow/Widower=4; Ages 16-25 = 1, 26-30 = 2, 31-35 = 3, 36-40 = 4, 41 & above = 5.
The first hypothesis which stated that personal traits, (Neuroticism, Extraversion, Conscientiousness, Agreeableness, Openness), sex, marital status, age would jointly and independently predict psychological distress was tested using Multiple Regression Analysis, the results are tabulated and interpreted in Table 2.

Table 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>β</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>.460</td>
<td>.215</td>
<td>6.21</td>
<td>.166</td>
<td>2.34</td>
<td>.020</td>
</tr>
<tr>
<td>Extraversion</td>
<td>-.100</td>
<td></td>
<td></td>
<td>-.144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-.233</td>
<td></td>
<td></td>
<td>-.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to experience</td>
<td>-.169</td>
<td></td>
<td></td>
<td>.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.024</td>
<td></td>
<td></td>
<td>.722</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.352</td>
<td></td>
<td>5.17</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td>.018</td>
<td></td>
<td>.270</td>
<td>7.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.028</td>
<td></td>
<td>.410</td>
<td>.682</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results presented in Table 2 showed that personality traits and demographic factors jointly predicted psychological distress among IDPs $R = .46; F (8, 182) = 6.21; p < .05$. This implies that the hypothesis which stated that personality traits (neuroticism, openness to experience, extraversion, conscientiousness, agreeableness), age, sex, and marital status will jointly predict psychological distress among IDPs was confirmed. This is an indication that personality dispositions and demographic factors could predict psychological distress. However, only neuroticism, conscientiousness, openness to experience and sex jointly accounted for 22% ($R^2 = .215$) variance observed on psychological distress.

With regards to the contributions of individual factors, the results clearly showed that neuroticism significantly made a unique positive contribution to the increase in emotional distress, when the variance explained by the other seven factors are controlled for $β = .166; t = 2.34; p < .05$. The higher the level of neuroticism, the more the incidence of psychological distress among IDPs. Conscientiousness, on the other hand, significantly made a strong negative contribution in reducing incidences of psychological distress among IDPs $β = -.233; t = -3.36; p < .05$. IDPs that were high on conscientiousness are less likely to suffer psychological distress. Similarly, the openness to experience significantly made a negative
contribution to changes in psychological distress $\beta = -0.169; t = -2.45; p < 0.05$. IDPs that scored higher on openness to experience are less likely to suffer psychological distress. Also, sex difference independently contributed positively to changes observed in psychological distress $\beta = -0.352; t = 5.17; p < 0.05$. Increased incidences of psychological distress among IDPs depend on biological differences of being male or female. Therefore, the individual prediction has been confirmed for neuroticism, conscientiousness, openness to experience and sex difference, but not for extraversion, agreeableness, marital status, and age.

Discussion and Conclusion

This study investigated the predictive role of personal factors on psychological distress among internally displaced persons in Maiduguri. In view of this, a hypothesis which states that personal traits, age, sex, and marital status will jointly and independently predict psychological distress among IDPs was confirmed. Also, neuroticism, conscientiousness, openness to experience and being male or female predicted psychological distress among IDPs in Maiduguri. This finding was supported by a study conducted by Tyseen et al. (2001) who found neuroticism to be an important predictor of depression. Further support was received in this study with the finding of Shaheen et al. (2014) who maintained that there was a positive relationship between neuroticism, conscientiousness, and openness to experience dimensions of personality and psychological distress among India students.

In conclusion, neuroticism was found to have a predictive role in psychological distress among IDPs in Maiduguri. Generally, negative affect such as hostility, anger, impulsivity are associated with neuroticism and this might be a factor in this prediction because an IDPs that is hostile, and impulsive might get more frustrated, tense, restless in a restricted and overcrowded environment in the IDPs camps. Also, openness to experience was found to have a negative prediction on psychological distress among IDPs in Maiduguri. Being open to experience involved novelty, ideas, intellectual, aesthetic and so on. The presence of these characteristics in an individual presence in IDPs camp where there is no room for any kinds of innovation, no freedom of movement, everything is being structured and restricted because governments and non-governmental organizations (NGOs) provided virtually everything needed there is a tendency for such individual to experience psychological distress. Lastly, conscientiousness was found to have a negative prediction on psychological distress among IDPs in Maiduguri. As we all know, conscientiousness involved being thoroughness, goal-orientation, meticulousness, and dependability. The presence of this
characteristic in an individual especially in a stressful and disorganized environment such as IDPs camps could predisposed such persons to experience mental distress.

With respect to the finding of this study, it is recommended that in executing Mental Health and Psychosocial Support Services (MHPSS) project by governmental and non-governmental agencies, personality assessment should be incorporated. This would enable the mental health providers (MHP) to understand the individual risk factors and predispositions to psychological distress, and appropriate tailored psychological intervention would be instituted. Therefore, MHPSS should not be limited to only counseling and psycho-education without proper assessment of individual predisposition in a humanitarian context.

Limitations

Firstly, brief big five personality inventory was adopted in this study because of its briefness, and the peculiarity of the population of interest. However, this might leave some gap on filled because the numbers of the item might not cover all the dimension of personality needed. Secondly, the numbers of participants recruited for this study was relatively small for appropriate generalization to be made among IDPs persons in Nigeria.

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