Trait resilience among Nigerian adults: the role of psychological distress, social support and mindfulness

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Abstract

Background: Resilience is a personal strength that reduces harm from adversity and mediated wellbeing by promoting positive and personal psychosocial ability. Such promotive activity termed 'saliostasis' had been fostered through psychotropic medications, positive social support and mindfulness practices. The present study aimed to add to the few study on resilience in Nigerian adults by examining the role of psychological distress, social support and mindfulness in fostering resilience.

Methods: A total of 192 adults in Kaduna participated in the study. All of them filled the researchers' self-developed 4-item socio-demographic questionnaire, 25-item resilience scale (RS), 14-item hospital anxiety depression scale (HADS), the 3-item Oslo social support scale and the 14-item Frieburg mindfulness inventory. Ethical approval was received from the ethical board of Federal Neuropsychiatric Hospital, Barnawa-Kaduna.

Results: The screened prevalence of psychological distress as measured by hospital anxiety depression scale was 63.00% and 54.70% respectively for depression and anxiety. Half of the participants (50.50%) had low resilience scores and another 46.40% had low social support score. Resilience was negatively correlated with psychological distress and positively associated with social support and mindfulness. The correlations were significant for psychological distress and mindfulness. Participants high on resilience reported significantly low depression score and high mindfulness practices. Anxiety and social support did not significantly contribute to the resilience characteristics of the study participants.

Conclusion: This study adds to existing study on resilience among adult Nigerian and identified low depression score and high mindfulness practice as two variables that can foster high resilience among them. These variables can be manipulated among adult Nigerians to boost their resilience and consequently wellbeing.

Keywords: Trait resilience; Adult Nigerians; Psychological distress; Social support; Mindfulness

Introduction

Trait resilience is a personal strength that helps individuals buffer and get by with life adversity and bring about good adjustment and development thereafter.[1] A meta-analysis of 60 studies on resilience had

demonstrated that a pooled moderate reverse relationship existed with negative (i.e. depression, anxiety and negative affect) indicators of mental health and a direct medium association with positive (i.e. life satisfaction and positive affect) determinants of wellbeing.[1]

A model through which resilience do impact mental health were by reducing harm from adversity, offering protection from negative life events and promoting personal ability that help one to overcome potential threats.[2] The first two part of this model contributed to the relations between resilience and mental health indicators as by the meta-analysis above. However, studies on the variables that boost resilience to carry out its health enabling and promotional roles were few. Specific studies on the variables fostering resilience reported on the role of psychotropic medications, positive social support and mindfulness practices. [3-5] The process of fostering resilience through the activities intended to promote wellbeing had been described as 'saliostasis'.[3]

The focus on 'saliostasis' in recent time had been boosted by positive psychology and psychiatry that identified resilience as the framework towards adaptive coping, positive transformation and flourishing.[6,7] The present study aimed to add to the few study on resilience in Nigerian adults by examining the role of psychological distress, social support and mindfulness in fostering resilience.

Methodology

A total of 192 adults in Kaduna participated in the study. All of them filled the researchers' self-developed 4-item socio-demographic questionnaire, 25-item resilience scale (RS), 14-item hospital anxiety depression scale (HADS), the 3-item Oslo social support scale and the 14-item Frieburg mindfulness inventory. Ethical approval was received from the ethical board of Federal Neuropsychiatric Hospital, Barnawa-Kaduna.

Resilience Scale (RS)

Resilience Scale (RS) is a 25-item measure of psychological resilience and have good validity and reliability (Cronbach's α range of 0.72 – 0.94) from several studies[8-10]. It is scored on a likert scale of 1 to 7 grouping respondents into: low, moderate and high resilience scores. In this study, the RS was used to report the trait resilience of the participants, by categorizing them into high or low resilience characteristics as designated by the originator of this measuring scale.

Hospital Anxiety Depression Scale (HADS)

The Hospital anxiety and depression scale (HADS) is 14-item measure of anxiety and

depressive state and had been used in both clinical and non-clinical population. It consists of seven depression items and seven anxiety items and has been validated for use in Nigeria.[11,12] A score of 8 and above on either of the two components is regarded as case. Both the depressive and anxiety subscales are used in this study.

The Oslo 3-items Social Support Scale (OSS-3)

The brief OSS-3 measures social functioning as a good predictor of mental health.[13] It measures both the structural and functional aspects of social support by reporting the number of people the respondent feels close to, the interest and concern shown by others, and the ease of obtaining practical help from others.[14] Its brevity and normative data are strength of this measure over its less documented reliability (Cronbach's alpha of 0.58 to 0.60).[15-17]

The Freiburg Mindfulness Inventory (FMI)

The FMI is a short 14-item measure of experience of mindfulness practice.[18] It is a uni-dimensional measure of several aspects of mindfulness state-and trait-like components with each question scored on a four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree).

Data Analysis

Descriptive statistics was used to show the frequency distributions of participants' socio-demographic and psychological variables. Pearson's moment correlation coefficients were used to demonstrate the relationship between the mental wellbeing variables. A MANOVA was carried out to determine the difference between the high and low resilience scores of participants based on their pooled mental health variables. All statistical analysis was two-tailed at alpha level of less than 0.05 except for the violations of Levene's Test of Equality evaluated at level of less than 0.01.

Results

As shown in table 1, participants mean age was 25.79 years (SD = 6.09) with age range of 18-48 years. Females constituted 39.60% of the participants, majority had more than 12 years of formal education (95.30%) and 73.40% were unmarried as at the time of data collection. Table 2 showed that psychological distress as measured by hospital anxiety depression scale screened 63.00% and 54.70% of the participants as having depression and anxiety respectively. Table 2 further showed that half of the participants (50.50%) had low resilience scores and another 46.40% had low social support score. Table 3 showed that resilience was negatively correlated with psychological

distress and positively associated with social support and mindfulness. The correlations were significant for psychological distress and mindfulness.

MANOVA analysis showed a significant difference between the resilience characteristics (low vs. high) of the participants when considered jointly on their psychosocial variables (depression, anxiety, social support and mindfulness), Wilk's Lamda = 0.805, $F(4,187) = 11.336$, $p < 0.01$ and partial $\tilde{\eta}2 = 0.20$. A separate ANOVA was conducted for each dependent variable with each ANOVA evaluated at an alpha level of 0.01 (i.e. 0.05/4). There was a significant difference between high and low resilience characteristics of participants on two of the four components of participants' psychosocial characteristics: depression $F(1,190) = 18.26$, $p < 0.001$ and partial $\tilde{\eta}2 = 0.09$ and mindfulness $F(1,190) = 36.89$, $p < 0.001$ and partial $\tilde{\eta}2 = 0.16$. There was not a significant difference between the high and low resilience characteristics of the participants on the remaining variables measured in this study: anxiety $F(1,190) = 0.80$, $p = 0.37$ and partial $\tilde{\eta}2 = 0.00$: and social support $F(1,190) = 0.01$, $p = 0.92$ and partial $\tilde{\eta}2 = 0.00$.

Table 4 displayed the means and standard deviations for the dependent psychological variables between high and low levels of resilience. The low resilience group reported high psychological distress while the high resilience group reported higher mindfulness practices. There was no difference in the mean social support distribution between the high and low resilience groups.

Table 1 – Socio-demographic distributions of participants (N=192)

Variables	Frequency	Percentage
Age in years		
<30	144	75.00
=/>30	48	25.00
Mean (SD) = 25.79 (6.09)		Range = 18-48
Gender		
Male	116	60.40
Female	76	39.60
Education level in years		
</=12	9	4.70
>12 years	183	95.30
Marital status		
Single	141	73.40
Married	51	26.60

Table 2 – Psychological characteristics of participants

Variables	Frequency	Percentage
Depression subscale of HADS		
Case	121	63.00
Non-case	71	37.00
Anxiety subscale of HADS		
Case	105	54.70
Non-case	87	45.30
Resilience		
Low	97	50.50
High	95	49.50
Social support		
Low	89	46.40
Moderate	103	53.60

HADS = Hospital Anxiety Depression Scale

Table 3 – Correlations of participants' psychological variables

Variables	1	2	3	4	5	Mean	SD
1. Resilience	1					129.13	20.68
2. HADS depression subscale	-.247**	1				8.92	3.51
3. HADS anxiety subscale	-.157*	.253**	1			8.23	3.99
4. Social support	.064	.026	.068	1		8.59	1.36
5. Mindfulness	.399**	-.321**	-.146*	.049	1	41.03	5.98

HADS = Hospital Anxiety Depression Scale

MANOVA analysis showed a significant difference between the resilience characteristics (low vs. high) of the participants when considered jointly on their psychosocial variables (depression, anxiety, social support and mindfulness), Wilk's Lamda = 0.805, $F(4,187) = 11.336$, $p < 0.01$ and partial $\tilde{\eta}2 = 0.20$. A separate ANOVA was conducted for each dependent variable with each ANOVA evaluated at an alpha level of 0.01 (i.e. 0.05/4). There was a significant difference between high and low resilience characteristics of participants on two of the four components of participants' psychosocial characteristics: depression $F(1,190) = 18.26$, $p < 0.001$ and partial $\tilde{\eta}2 = 0.09$ and mindfulness $F(1,190) = 36.89$, $p < 0.001$ and partial $\tilde{\eta}2 = 0.16$. There was not a significant difference between the high and low resilience characteristics of the participants on the remaining variables measured in this study: anxiety $F(1,190) = 0.80$, $p = 0.37$ and partial $\tilde{\eta}2 = 0.00$: and social support $F(1,190) = 0.01$, $p = 0.92$ and partial $\tilde{\eta}2 = 0.00$.

Table 4 – Means of psychosocial characteristics based on their resilience scores (low vs. high)

Variables	Resilience	
	Low	High
HADS depression subscale	9.95 (0.34)	7.87 (0.35)
HADS anxiety subscale	8.49 (0.41)	7.96 (0.41)
Social support	8.60 (0.14)	8.56 (0.14)
Mindfulness	38.65 (0.56)	43.46 (0.56)

HADS = Hospital Anxiety Depression Scale

Discussion

The primary aim of this study was to analyse some mental health attributes (depression, anxiety, social support and mindfulness) among predominant young adult Nigerians that fostered high resilience. The results reported high resilience adults to significantly had low depression score and high experience of mindfulness practices.

These findings are consistent with previous studies results that associated low psychological distress and high experience of mindfulness with high resilience.[1,3,5,10,17] These purported that resilience was fostered by the richness of the experience of mindfulness and/or efforts that lowered depressive symptoms. While the former offered protection against depressive mood condition in the participants by boosting their resilience, the latter confer resilience-building by lowering mental distress. A mechanism for these observations had been explained by Bajaj and colleague as mindfulness fostering resilience and both advancing well-being.[5]

There was no significant difference in the anxiety symptoms level and social support characteristics of participants with high resilience scores compared to their counterpart. These observations agreed with results from other studies that identified resilience not to be significant in relation to anxiety[18] and social support.[13,19] Anxiety was registered as a non-predictor of resilience because of cultural and geographical region that is associated with low levels of socioeconomic wellbeing and happiness. The finding in term of anxiety seemed to be contrary to earlier study in similar region.[10] This may be because of statistical analysis done which was only correlational and not at level of predictors analysis as carried out in the current study.

That social support was also not significantly related to resilience may not be surprising because resilience as measured in this study was a personal trait which appeared to be related more to internal locus than the externals.[13,19] In other words, social support will buffer psychological distress when the individual concerned had high external locus of control which ran contrary to what resilience, an intra-personal trait should promote. Such supported the two factor structure of resilience scale as personal competence and the acceptance of self and life.[9]

Two major limitations of this study were the study measures being affected by self-report bias and the cross-sectional nature of the study preventing a cause-effect determination. For the former, participants' familiarity with study measures can be reduced by employing multiple assessments and using multiple-dimensional measures. These should limit the subjectivity of participants. On the latter limitation, the findings interpretations must be with caution due to the cross-sectional nature of the data. Hence generalisation of results from the study sample to the multi-ethnic Nigerian

population cannot be said to be acceptable. Future study should take these limitations into consideration by making the sample more representative of Nigerian ethnic diversity and longitudinal in nature to reduce participants' bias and to allow generalisation of result findings.

Conclusion

This study adds to existing studies on resilience among adult Nigerian and identified low depression score and high mindfulness practice as two variables that can foster high resilience among them. It also reported that social support and anxiety may have no relationship with resilience. Hence, the study provided some variables that can be manipulated and succinctly crafted among adult Nigerians to boost their resilience and consequently wellbeing.

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Conflict of interest: Nil

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I will no longer use it.
I have to quit
I quitted and I will not use once more
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Never again
I am not addicted
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