

Efficacy of Narrative Exposure Therapy and Age Differences on Psychological Trauma Symptoms among Internally Displaced Persons in Jos, Plateau State, Nigeria

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Abstract. There are growing need for experiential literatures on psychological trauma symptoms and corresponding therapies, considering traumatic experience in Nigeria. The present study had assessed efficacy of narrative exposure therapy and age differences on psychological trauma symptoms among internally displaced persons. A repeated measures design was used to examine pre-test and post-test outcomes. The participants used for the study were 24 internally displaced persons (8 males and 16 females) who were randomly selected and assigned into two (psychological intervention and control) groups. Trauma Symptoms Checklist-40 (TSCL-40) was used in assessing all the participant and the treatment group had 10 sessions of NET therapy, while the control group was without intervention. The study hypothesis was statistically tested, using one-way analysis of variance. The outcome of the ANOVA for the hypothesis tested revealed, that Narrative Exposure Therapy (NET) was more impactful on younger participants than older ones on two symptoms; depression ($F = 9.712$, $p = 0.011$), and sexual problems ($F = 6.665$, $p = 0.027$). The hypothesis was therefore upheld for only depression and sexual problems. There is need for more psychological studies to be conducted amongst children at internally displaced camps so that both young and old would have gone through the therapy.

Keywords: Psychological Trauma, Symptoms, Age differences, Narrative exposure therapy, Internally Displaced Persons.

1. Introduction

There are dearths in psychological trauma and Post traumatic stress disorder literatures as it relates to children, adolescents and adults in Nigeria. The rate of PTSD may be lower in children than adults, but in the absence of therapy, symptoms may continue for decades. One estimate suggests that the proportion of children and adolescents having PTSD in a non-war torn population in a developed country may be 1% compared to 1.5% to 3% of adults, and much lower below the age of 10 years. On average, 16% of children exposed to a traumatic event develop PTSD, varying according to type of exposure and gender. Njau, J.W. (2005).

Predictor models have consistently found that childhood trauma, chronic adversity, and family stressors increase risk for PTSD as well as risk for biological markers of risk for PTSD after a traumatic event in adulthood. Experiencing bullying as a child or an adult has been correlated with the development of PTSD. Post traumatic dissociation in children is a predictive indicator of the development of PTSD later in life. This effect of childhood trauma, which is not well understood, may be a marker for both traumatic experiences and attachment problems. Proximity to, duration of, and severity of the trauma make an impact and interpersonal traumas cause more problems than impersonal ones. Breslau, Chilcoat, Kessler, & Davis (1999). Although, there is possibility of those with the risk of developing PTSD are individuals who are exposed to physical abuse,

physical assault, or kidnapping. Women who experience physical violence are more likely to develop PTSD than men. Also, those within the military service are at risk of developing PTSD. Around 78% of people exposed to combat do not develop PTSD; in about 25% of military personnel who develop PTSD, its appearance is delayed. Internally displaced persons are also at an increased risk for PTSD due to their exposure to war, hardships, and traumatic events. While the rates for PTSD among refugee populations range from 4% to 86%. Also, the stresses of war impact on everyone involved, displaced persons have been shown to be more affected than non-displaced persons. Njau, J.W. (2005). Also, unexpected death of a loved one is the most common traumatic event type reported in cross-national studies. However, the majority of people who experience this type of event will not go on to develop PTSD. An analysis from the WHO World Mental Health Surveys found a 5.2% risk of developing PTSD after learning of the unexpected death of a loved one. Because of the high prevalence of this type of traumatic event, unexpected death of a loved one accounts for approximately 20% of PTSD cases worldwide. Breslau, Chilcoat, Kessler & Davis, (1999).

Beiser, Wiwa and Adebajo (2010) did a comparative study of PTSD among the people of Niger Delta and found a six-month period prevalence of 14.5% among adults in the group relatively spared of the conflict as against the 60.5% found among the adult population in the conflict affected area. Cardozo, Vergara, Agani and Gotway (2000) reported that those over the age of 65 were at greater risk of developing Post Traumatic Stress Disorder following the war in Kosovo. This was supported in a study done by Eytan, Gex-Fabry, Toscani, Deroo, and Bovier (2004) who investigated determinants of post-conflict symptoms in Albanian Kosovo's. The reliability of these findings may have been limited by the use of self-report measures. However, the findings were supported by Cheung (1994) who studied PTSD among Cambodian refugees in New Zealand. Dahl, Mutapcic and Schei (1998) on the other hand found that being over 25 years of age predicted PTSD in their sample of displaced Bosnian women in a war zone. Lonigan, Shannon, Taylor, Finch and Sallee (1994) reported that younger children are more likely to develop PTSD. Although, these studies did not control for trauma type when investigating age as a predictor of PTSD. Moreover, there are sparse data to make any assertion on differential effects of age on the development of PTSD because individual studies have focused on narrow age ranges making it difficult to compare

outcomes for younger and older people (Lonigan, Shannon, Taylor, Finch & Sallee 1994). Researches about trauma and intervention with internally displaced persons are still growing, but have especially grown over the past decade. There are few data on the number of reviews to date of psychological interventions with internally displaced persons. Rather there are existing literatures with refugees.

2. Objectives of the Study

The objective of the study was to examine age differences in the outcome of Narrative exposure therapy on psychological trauma symptoms among internally displaced persons at a camp in Jos, Plateau State Nigeria.

3. Hypothesis

There will be significant age differences in the efficacy of Narrative Exposure Therapy on psychological trauma symptoms of older internally displaced persons than younger internally displaced persons.

4. Methodology

4.1 Research Design

The study was a repeated measure experimental design. It comprised of a two group experimental study which examined pre-test/post-test outcomes. The design ensures that the study has a strong internal validity. Also, allowing participants to be randomly assigned into two groups. One group was exposed to the clinical intervention (NET) while the other was not. Both groups were after words pre-tested and post-tested on their psychological trauma symptoms.

4.2 Population

Participants were 49 Internally Displaced Persons (IDPs), aged 18 to 76 years, at an IDP Camp in Jos Plateau state. They were identified by socio-demographics and matched according to gender. Those who participated were persons who had met the eligibility criteria of DSM V for PTSD and the cut-off score of psycho trauma symptoms assessed by the Trauma Symptoms Check List-40 which include, Dissociation (Mean 15.52) with 55.1% prevalence, anxiety (Mean 16.85) with 55.1% prevalence, depression (Mean 18.11) with 57.1% prevalence, SATI (Mean 13.72) with 59.2% prevalence, while sleep disturbance (Mean 13.63) with prevalence of

55.1%, and sexual problems (Mean 10.77) with prevalence of 53.1%. Those that were excluded are IDPs that had current florid symptoms of psychotic disorders, active homicidal tendencies, dementia or mental retardation.

The sample study comprised of 49 Internally Displaced Persons (IDPs). Their mean age was 33.04 years with a standard deviation of 11.49 years. The gender distribution showed that 18 (36.7%) of the participants were males, and 31 (63.3%) were females. A total of 23 (47.9%) had no formal education, while 15 (31.3%) had only primary education, 7 (14.6%) had only secondary education and 3 (6.3%) had tertiary education. There was a total of 14 (29.2%) single persons, 30 (62.5%) persons are married, and 4 (8.3%) were either separated or divorced. 18 (36.7%) of them were non-professionals in their line of work, 2 (4.1%) were professionals; majority of them 29 (59.2%) were unemployed.

With regards to monthly income, the 23 (65.7%) had no income, 7 (20%) earned less than N20,000 (twenty thousand naira) monthly, 4 (11.4%) earned between N20, 000 – N50, 000 monthly, 1 participant earned more than N50, 000 monthly.

4.3 Instrument for Data Collection

A questionnaire comprising two different instruments as well as a section tapping information on social demographic characteristics of participants were used in the study. An instrument was adopted and validated by the researcher. The instrument is described as follows:

4.4 Trauma Symptom Checklist – 40 (TSCL-40)

The tool was developed by Briere and Runtz (1989) and is a 40-item self-report measure of symptomatic distress in adults arising from childhood to adult traumatic experiences. It is a measure of current psycho-traumatic experience in individuals. Respondents were asked to rate how often they have experienced each symptom in the last two months using a 4-point frequency rating scale ranging from 0 ("never") to 3 ("often"). The TSC-40 has six subscales: Anxiety, Depression, Dissociation, Sexual Abuse Trauma Index, Sexual Problems, and Sleep Disturbances and yields a range of scores 0-120 with higher scores representing severity of trauma.

Regarding its psychometric properties, the Sexual Problems subscale displays a high level of reliability coefficient of ($\alpha = .73$); (b) the Sleep Disturbance subscale coefficient of ($\alpha = .77$); (c) the reliability for the SATI is alpha coefficient of = .62;

and (d) with a total reliability score of $\alpha = .90$. The TSCL- 40 was used in the study because it provides a general measure of current traumatic symptoms among disaster and combat survivors. Additionally, its psychometric properties have been impressive, with sub scales alphas ranging from .66 to .77 and total scores alpha averaging .89 and .91 (Brian, Janet, Allison & Stacy, 2007). The clinical elevations were such that the score for each subscale is given as the sum of the relevant items described:

Dissociation: 7, 14, 16, 25, 31, 38

Anxiety: 1, 4, 10, 16, 21, 27, 32, 34, 3, 9

Depression: 2, 3, 9, 15, 19, 20, 26, 33, 37

Sexual Abuse Trauma Index 5, 7, 13, 21, 25, 29, 31

Sleep Disturbance 2, 8, 13, 19, 22, 28

Sexual Problems 5, 9, 11, 17, 23, 29, 35, 40

4.5 Procedure

After the validation of the instrument, the study was carried out at an Internally Displaced Persons (IDPs) camp Jos, Plateau State. An official permission was obtained from the Management of the internally displaced Camp. Thereafter, the researchers visited the camp for research sensitization and familiarization. During the visit, internally displaced persons were briefed on the research study; its objectives, procedures and anticipated benefits. They were also made to anticipate the selection process, which would give everyone an equal opportunity to participate in the study.

Subsequently research assistants were recruited to conduct the selection and random assignment process of participants to the intervention and non-intervention groups. The participants who had qualified for selections were those who met the criteria of DSM 5 for PTSD and had complained of recurrent flash backs of traumatic experience at the point of the visit were used for the study. Participants assessed for PTSD using DSM 5 and TSCL-40 for Psycho traumatic symptoms and had met the eligibility criteria of the screening tools were used for the study. The totals of eighty-four participants were assessed using DSM 5 criteria for PTSD and only forty-nine participants met the criteria. These forty-nine participants who were then administered the Trauma Symptoms Check List 40 for twenty-nine participants had met the eligibility status while five participants withdrew from the research study, leaving twenty-four participants to complete the study.

The twenty-four participants were allocated into the intervention and non-intervention groups with twelve

participants in each group randomly assigned via the lottery method. In this case, ‘No’ or ‘Yes’ were tagged in twelve folded pieces of papers in a hat for internally displaced persons to pick, one at a time until the last had picked. Participants were eventually selected for the intervention and non-intervention group. As soon as this was concluded, four clinical psychologists with clinical practice were recruited as research assistants. They were further trained on the narrative exposure therapy protocol.

The trained research assistants eventually provided the interventions for the participants who were assigned to the intervention group; they had a total of ten therapy sessions lasting between 60 and 90 minutes per session with the internally displaced persons. Thus, the clinical intervention was delivered using the structured published manual on Narrative Exposure Therapy of Schauer, Neuner and Elbert (2011). The therapists commenced by administering the TSCL-40 to the participants in the intervention and non-intervention groups to determine the baseline psycho traumatic symptoms of the internally displaced persons. After the conclusion of ten sessions, a post test assessment using TSCL-40 was done for both groups. Finally, after the post-test participants in the intervention group were debriefed. As an ethical obligation the researchers had paid attention to the needs and concerns of the internally displaced persons and were addressed within the psycho social support context of the camp programme.

5. Results

Mean scores and prevalence rate of psychological trauma symptoms of participants at baseline (N 49)

Table 1: TSCL - 40 Symptom pattern among participants (N49)

	F	%	Mean	Standard Deviation
Dissociation	27	55.1	15.52	2.58
Anxiety	27	55.1	16.85	3.94
Depression	28	57.1	18.11	3.20
Sexual Abuse Trauma Index (SATI)	29	59.2	13.72	3.06
Sleep Disturbance	27	55.1	13.63	2.37
Sexual Problems	26	53.1	10.77	3.71

Table 1 above, present the mean score of psychological trauma symptoms and it had revealed the following mean scores and prevalence among participants: Dissociation (Mean=15.52) with 55.1% prevalence, anxiety (Mean=16.85) with 55.1% prevalence, depression (Mean=18.11) with 57.1% prevalence, SATI (Mean=13.72) with 59.2% prevalence, while sleep disturbance (Mean=13.63) with prevalence of 55.1%, and sexual problems (Mean=10.77) with prevalence of 53.1%.

Table 2 below, presents the outcome of further screening of forty-nine initially identified index cases for post-traumatic stress disorder that attained the cut off score for TSCL-40. Twenty persons met the criteria and were therefore adopted as participants for the main study. In so doing they were differentiated into intervention and non-intervention groups.

4.6 Method of Data Analysis

The descriptive statistics was used in reporting the prevalence of psycho trauma symptoms and their associations with socio-demography factors were test by Chi-square analysis. While inferential statistics, the one-way analysis of variance (ANOVA) was used to test for mean differences of efficacy of Narrative exposure therapy using TSCL-40 scores. ANOVA was chosen because it guarantees the comparison of group means either between or within. The probability value of $p \leq 0.05$ was used as the significant value for analysis in the study.

4.7 Ethical Considerations

The researchers had obtained institutional permission to conduct the study following an informed consent which was obtained from the participants. The researchers guaranteed informed confidentiality of pre and post-test status of those that participated in the study. Participants who were affirmative on PTSD and the scales of TSCL-40 were exposed to narrative exposure therapy. The non-intervention group was also protected from psychological and physical harm, through the amp psychosocial support programme. Finally, the participants right to withdraw at any time without adverse consequences was also assured and guaranteed.

Table 2: Pre-test distribution of psychological trauma symptoms between study groups of internally displaced persons

	Non-intervention N = 12				Intervention (NET) N = 12			
	F	%	Mean	SD	f	%	Mean	SD
Dissociation	7	29.2	13.08	3.45	7	29.2	13.17	3.71
Anxiety	5	20.8	15.58	4.12	8	33.3	17.67	5.31
Depression	6	25.0	18.08	3.45	8	33.3	18.58	3.09
SATI	7	29.2	13.75	3.84	8	33.3	14.17	3.30
Sleep Disturbance	8	33.3	14.17	2.04	6	25.0	13.83	2.48
Sexual Problems	9	37.5	9.92	5.53	7	29.2	9.67	5.53

Table 2 above, shows the pre-test results for the twenty-four study participants had revealed the following psychological trauma symptoms; the intervention group had a slightly higher mean score on dissociation (13.17, SD=3.71), anxiety (17.67,SD=5.31), depression (18.58, SD=3.09), and sexual abuse trauma (14.17, SD=3.30); while the non-intervention group had higher mean scores on sleep disturbance (14.17, SD=2.04), and sexual problems (9.92, SD=5.53). Generally, the intervention group had a slightly higher mean score on psychological trauma symptoms (75.50, SD=14.15).

Table 3 below presents the outcome of result for 24 participants differentiated into intervention and non-intervention groups at the end of study.

Table 3: Post-test distribution of psychological trauma symptoms between study groups

	Non-intervention N = 12				Intervention (NET) N = 12			
	F	%	Mean	SD	f	%	Mean	SD
Dissociation	11	45.8	13.50	4.76	4	16.7	6.33	5.11
Anxiety	9	37.5	18.42	6.53	3	12.5	7.58	6.56
Depression	9	37.5	18.42	6.87	2	8.3	7.92	7.72
SATI	11	45.8	14.25	4.00	3	12.5	6.33	5.47
Sleep Disturbance	12	50.0	14.92	2.99	3	12.5	6.58	4.74
Sexual Problems	10	41.7	9.08	5.96	2	8.3	3.33	5.74

Post-test scores on psychological trauma sub scales of participants

Table 3 above and shows the post-test mean scores of psychological trauma subscales of participants with PTSD revealed that intervention group had lower scores on dissociation (6.33, SD=5.11), anxiety (7.58, SD=6.56), depression (7.92, SD=7.72), sexual abuse trauma (6.33, SD=5.47), sleep disturbance (6.58, SD = 4.74), and sexual problems (3.33, SD=5.74). Also, the intervention group had lower psychological trauma mean scores than the non-intervention group (31.35, SD=28.50).

Hypothesis

Hypothesis stated that there will be age group differences on the impact of Narrative Exposure Therapy (NET) on psychological trauma symptoms of participants.

Table 4: Mean scores on psychological trauma symptoms across age of participants with posttraumatic stress disorder (Intervention Group)

	Age Group							
	Younger age (≤ 35 years)				Older age (≥ 36 years)			
	F	%	Mean	SD	f	%	Mean	SD
Dissociation	1	8.3	4.50	2.62	3	25.0	10.00	7.26
Anxiety	1	8.3	5.26	4.77	2	16.7	12.25	7.81
Depression	0	0.0	4.25	3.69	2	16.7	15.25	8.88
SATI	1	8.3	4.75	3.73	2	16.7	9.50	7.55
Sleep Disturbance	1	8.3	5.00	3.16	2	16.7	9.50	7.55
Sexual Problems	0	0.0	.88	1.73	2	16.7	8.25	8.10

Table 4 deals with the mean scores of subscales of psychological trauma symptoms across age of participants with PTSD and it revealed that younger IDPs exposed to NET had lower scores than older IDPs exposed to NET on dissociation (Mean= 4.50, SD= 2.62), anxiety (Mean=5.26, SD= 4.77), depression (Mean=4.25, SD=3.69), sexual abuse trauma (Mean=4.75, SD=3.73), sleep disturbance (Mean=5.00, SD =3.16), and sexual problems (Mean=0.88, SD= 1.73). Also, younger IDPs had lower mean score on psychological trauma than older IDPs exposed to NET (Mean=18.88, SD=13.29).

Effect of age in the Efficacy of Narrative Exposure Therapy (NET) on psychological trauma symptoms

The outcome of the one-way ANOVA showed that there were differential results on the outcome of the test of the hypothesis. NET was more impactful on younger participants than older ones on two symptoms; depression (F = 9.712, p = 0.011), and sexual problems (F = 6.665, p = 0.027). The hypothesis was therefore upheld for only depression and sexual problems. Table 5 below shows the details of the results.

Table 5: ANOVA Source Table for Psychological Trauma Symptoms across Age (Intervention Group)

	Sum of Squares	Df	Mean Square	F	Sig.
Dissociation					
Between Groups	80.667	1	80.667	3.916	.076
Within Groups	206.000	10	20.600		
Total	286.667	11			
Anxiety					
Between Groups	130.667	1	130.667	3.818	.079
Within Groups	342.250	10	34.225		
Total	472.917	11			
Depression					
Between Groups	322.667	1	322.667	9.712	.011
Within Groups	332.250	10	33.225		
Total	654.917	11			
Sexual Abuse Trauma Index (SATI)					
Between Groups	60.167	1	60.167	2.241	.165
Within Groups	268.500	10	26.850		
Total	328.667	11			
Sleep Disturbance					
Between Groups	60.167	1	60.167	3.222	.103
Within Groups	186.750	10	18.675		
Total	246.917	11			
Sexual Problems					
Between Groups	145.042	1	145.042	6.665	.027
Within Groups	217.625	10	21.763		
Total	362.667	11			

6. Discussion of Findings

The outcome of the hypothesis could be attributed to the fact that older people tend to have more effective emotional regulation (Scheibe & Carstensen, 2010; Hay & Diehl, 2011) and their attention processes are biased toward positive stimuli (Reed et al., 2014) than younger people. Furthermore, many studies indicate that in this group (older people) some components of the physiological reactions evoked by negative material are markedly different. Such effects were reported in studies using cardiovascular, breathing and neuro-imaging data (Uchino et al., 2010; Gomez et al., 2016). Potentially, age-related dampening of various components of physiological reactions (either peripheral or central) evoked by emotional material could also help explain the reduction of interference observed in older PTSD

patients; which explains NET better impact on trauma symptoms of younger PTSD participants than older PTSD participants.

7. Conclusion

In conclusion, this study demonstrated that Narrative Exposure Therapy (NET) had no effects difference on participants’ psychological trauma symptoms across age group. Although NET is designed for PTSD related trauma and proved effective in IDPs and other vulnerable patient groups (Mauritz, Van Gaal, Jongedijk, Schoonhoven, Nijhuis-van der Sanden, & Goossens, 2016). These findings indicate that even in the unstable location of an IDP camp, where IDPS are exposed to psychological trauma and humanitarian crisis. NET does not have an effect across gender of internally displaced person. This

research represents an important contribution to research investigating possibilities and acceptability of psychological interventions with internally displaced persons (IDPs).

8. Recommendations

The following recommendations are made based on the findings of the study:

- Future research should endeavor to use larger and different sample size in order to improve generality of the finding.
- There should be equal representation across all age groups.
- Future research should include comparison groups and other psychological therapy as alternative psychological treatments.
- Future studies should be done for children in the IDP camps for the purpose of comparing between children, adolescents and old that have gone through the therapy.

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