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**INFLUENCE OF MARKET DEMOLITION AND GENDER
ON POSTTRAUMATIC STRESS DISORDER AND SUICIDAL
IDEATION AMONG MARKET TRADERS IN OWERRI**

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ABSTRACT: This study investigated the influence of market demolition and gender on Posttraumatic Stress Disorder (PTSD) and Suicidal Ideation (SI) among market traders in Owerri Municipal. Four hundred participants (male: 200, female: 200; mean age = 33.8) were drawn from four markets in Owerri Municipal. Two instruments: the Posttraumatic Stress Scale (PKS) and Psychache Scale (PAS) were used to measure PTSD and SI respectively. The design of the study was cross sectional survey and the Multivariate Analysis of Variance (MANOVA) from the Statistical Package for Social Sciences 21 was used to analyze the data collected. The result of the research showed that market demolition had significant influence on PTSD ($F(1,400) = 12.93, p < .05$) and SI ($F(1,400) = 329.27, p < .05$). However, no gender difference was observed for PTSD ($F(1,400) = .64, p > .05$) and SI ($F(1,400) = .64, p > .05$). It was recommended that governments should engage in articulated policy actions targeted at proper relocation before embarking on the demolition cum destruction of people's sources of livelihood and that psychotherapists should take cognizance of the impact of economic misfortune, which the government has imposed on market traders, in the aetiology of PTSD and SI.

Keywords: Market Demolition, Gender, Posttraumatic Stress Disorder, Suicidal Ideation, Market Traders

INTRODUCTION

Posttraumatic Stress Disorder (PTSD) is commonly conceptualized as an anxiety disorder occurring at least one month after a traumatic event usually characterized by intensive fear, helplessness or horror, feelings of numbness, unreality, amnesia and a constant re-experiencing of the traumatic event in the form of dreams, thoughts and flashback episodes (APA, 2000; Halgin & Whitbourne, 2000). PTSD is multi-faceted, comprising three distinct symptom clusters: (a) Repeated and persistent intrusive memories related to the experienced trauma (thoughts, dreams/nightmares) (b) Avoidance of situations that are reminders of the trauma and psychological numbing and (c) Hyper-arousal, such as irritability, reduced

concentration and exaggerated startle response (DSM IV-TR; American Psychiatric Association 2000).

Suicidal Ideation (SI) can be defined as contemplation, nurturing of ideas, intention and plans to commit suicide. Silverman (cited in McAuliffe, 2002) defined SI as self-reported thoughts of engaging in suicide related behaviour. Operationally, market demolition is defined as traders' eviction from their shops and consequent destruction of the market as such participants were classified into two: those whose shops or places of business were demolished and those whose business places or shops were not demolished. Gender is defined as bio-psychosocial disposition connected to being male or female. Thus, gender was operationally defined as two categories: male and female. Posttraumatic stress disorder is a mental syndrome in which an individual suffers intense trauma and anxiety following a time interval after a very threatening experience. SI are thoughts and feelings related to a person's drive to take his/her life.

Globally, traumatisation continues to be a pervasive aspect of life in the 21st century. Posttraumatic Stress Disorder (PTSD) and other trauma related disorders are highly prevalent and disabling sources of huge suffering, commonly associated with other mental disorders and growing public health burden (Stein, Blanco & Friedman, 2011). Suicide claim an estimated 800,000 lives per year, or 1.4% of global annual death (World Health Organization, 2014). It affects all age groups (Pritchard & Hansen, 2005), but its rates rise toward later adulthood (Langlois & Morrison, 2002; Navaneelan, 2012). SI may negatively impact the health outcomes of individuals beyond the effects of completed suicide. Emerging research suggests that SI may impact all-cause mortality rates. Suicide is the tenth leading cause of death in the United States and the second leading cause of death among individuals aged fifteen to twenty-four years (Centre for Disease Control and Prevention, 2017).

Similarly, Suicidal behaviour is considered a major clinical and social problem especially in developed countries (Hawka, Suominen, Partonen, & Lonquist, 2008). Accurate information reflecting suicide rates are not always available. However, where it is, suicide is included in the ten leading causes of death across different age groups (Bertolote & Fleischmann, 2005). In Nigeria, suicide has skyrocketed from early 2018 and kept increasing unabated with mostly young persons resorting to the consumption of insecticides (especially 'Sniper'), hanging or any other means owing to a plethora of difficult situations ranging from extreme poverty to family and romantic issues (Okon, 2018). According to WHO (2018), Nigeria ranks 15th in terms of age standardized suicide rate in the world. Based to the above statistic, 17.5 out of every 100,000 males and 17.1 out every 100,000 females of specific age brackets will likely commit suicide annually in Nigeria.

Suicidal thoughts and attempts are strongly predictive of suicide deaths; can result in negative consequences such as injury, hospitalization and loss of liberty (Nock, Borges, Bromet, Cha, Kessler & Lee, 2008; WHO 2014). Taken together, suicide and suicidal behaviour comprise the nineteenth leading cause of global disease burden (i.e., years lost to

disability, ill-health, and early death) and the sixth and ninth leading cause of global disease burden among men and women who are up to 15 to 44 years of age (WHO, 2008).

Traumatic events such as demolition of Eke-ukwu market in Owerri municipal is one that cannot be forgotten in a hurry. This was carried out by the administration of Owelle Rochas Okorochoa as part of his urban renewal program in Owerri municipal. It started on Saturday, 26th August, 2017 and lasted for over three days. According to Okodili (2017), Eke-Ukwu Owerri Market, which later metamorphosed into Owerri Main Market, was initially a small ancestral market that served not just as a place of commerce, but a binding force of the five families that make up Owerri (known as Owerri-Nchi-Ise) namely: Umuororonojo, Umuoyima, Umuonyeche, Amawom and Umuodu. Over the years, as the town continued to develop, especially after Owerri became a capital city with the creation of Imo State in 1976, Eke-Ukwu Market continued to expand. This was followed by tremendous increase in commercial activities as the market became the major hub of commerce in the entire Imo State, owing mainly to its strategic location. Located along Douglas Road, a road named after an English man that visited Owerri during the colonial era, the Eke-Ukwu Market attracted investors, mostly from Onitsha and Aba in modern day Anambra and Abia States. The traders erected structures without approval or plans and in the course of time, the once small market had taken over the entire Douglas Road and spilled over into adjoining streets.

The negative consequences of this situation include growth of criminal activities like stealing and drug peddling, heavy traffic congestion along Douglas Road, pile up of solid wastes that were potent sources of infection and exploitation of naïve and non –indigenous traders by Owerri youths. Therefore the decision to demolish the market was not a wrong one but its implementation was not only shabby but insensitive.

This demolition was done without adequate provisions and compensation to the victims (traders), their source of livelihood were taken away and this was viewed as the highest level of insensitivity to the plight of the common people who were finding it very difficult to exist in these hard times. There were also cases where the traders found it very difficult to pay for a new shop in the location they were asked to relocate. In some extreme cases their children were compelled by austere situations to live with other members of the extended family. The ruthless and unplanned demolition of shops and business areas have exposed the traders cum business men and women to an arsenal of social ills such as kidnapping, armed robbery, broken homes and drug abuse, especially against the backdrop of African family system where an income earner has his children and a host of other extended family dependents to take care of. Apart from the death toll and injuries taken by this reckless and subhuman policy there is also a likely incidence of acute and posttraumatic anxiety disorders as well as depression on the side of the victims. This depression is likely to assume the dimension of suicide or suicidal thoughts.

Gender differences are known to influence the manifestation of PTSD. Some Researchers have suggested that males are more likely to experience traumatic events but that females are more likely to develop PTSD (Keane & Kaloupek, 2002; Kimerling *et al.*, 2007; Wittchen *et al.*, 2009). A large study of patients with mood disorder found that women had

more suicide attempts than men; supporting other findings that female gender is associated with suicide attempts (Tidemalm, 2014). Also the above research indicates that women are nearly twice as likely as men to report moderate difficulty with suicidal feelings or behavior. In Contrast, Rahma, (2014) found that male sex predicted risk for suicide and another study of stress and depression also demonstrated that under conditions of stress, male sex was a significant predictor of SI (Weisset *al.*, 2016). Clarifying the reasons for this gender disparity in PTSD rate may assist in furthering the understanding of the pathogenesis of the disorder as well as in guiding the tailoring of interventions to suit the specific needs of men and women. However, some studies from Middle Eastern countries have found no gender differences in PTSD, maintaining that consistent gender differences in suicide risk have not emerged (Shaar, 2013) However, this lack of consensus across studies may reflect various socio-demographic or clinical factors that differ for men and women (Rahma, 2014; Weisset *al.*, 2016).

Objectives of the Study

Generally, the objective of the study is to investigate if market demolition and gender will have significant influence on PTSD and SI among market traders in Owerri. The specific objectives comprise to investigate if market demolition will significantly influence PTSD; if market demolition will significantly influence SI; if gender will significantly influence PTSD and if gender will significantly influence SI. Also, it sought to investigate if market demolition and gender will significantly interact to influence PTSD and if they will interact to influence SI.

Hypotheses

Six (6) research assumptions were tested in this work. They comprise the following: that market demolition will have significant influence on posttraumatic stress and that market demolition will have significant influence on SI. Also that gender differences will have significant influence on PTSD on the one and SI on the other. Finally, the hypotheses that market demolition and gender will have significant interaction effect on posttraumatic stress on the one hand and SI on the other were also tested.

THEORETICAL FRAMEWORK

Two theories formed the theoretical bedrock for this study. They comprise the rational emotive behaviour therapy (REBT) theory of Ellis (1962) and the three step theory of suicide by Klonsky and May (2015). The rational emotive behaviour therapy theory by Albert Ellis is a detailed cognitive-affective-behavioural theory and practice of psychotherapy and the theoretical aspect is captured by the ABC paradigm (Ellis, 2008; Ellis & MacLaren, 1998; Ellis, 1962) and it argues that people's emotions and actions are related to their belief system. Therefore catastrophic consequences originate from peoples interpretations of the activating events. The implication of this theory to our study is that even though adversity, in our case market demolition may contribute to posttraumatic stress and SI, the major cause of these problems is the appraisal of the situation by the traders. The

proximal explanation of PTSD and pathological behaviour that causes PTSD are linked to explanatory style and dysfunctional beliefs or misinterpretation of the event (McNally, 2005; Revich, Seligman, & McBride, 2011). However, Revich *et al.*, (2011) introduced an existential perspective in his explanation of the aetiology of PTSD. Traumatic experiences and events usually challenge an individual's values and beliefs about safety, self-worth and the meaning of life. He argued that individuals who are unable to resolve this inundation to their ethos, values and belief system might be pushed to demoralization, disillusionment and social alienation. Even though the cognitive theory emphasizes the role of an individual's belief and the cognitive appraisal of adversity in the ethological chain of mental disorders, a relationship exist between the intensity or severity of a traumatic event and the individual's risk of developing PTSD (Davidson & Foa, 1991). What this implies is that despite the interpretation of the situation by market traders the intensity of the demolition affected the traders since the experiences were perceived by them as a threat to life. Studies of tortured political prisoners (Lavik, Hauff, Skrondal, & Solberg, 1996) and people living in a nation devastated by war and political cum religious conflict (Macksoud & Aber, 1996) provide an evidentiary core to this claim.

The three step theory of suicide (3ST) (Klonsky & May 2015) is another theory utilized in explaining SI. It is built on the ideation-to-action framework which provides a parsimonious and testable model of suicide. Klonsky and May 2015 avers that pain and hopelessness, connectedness and suicidal capacity are the three key stepwise constructs in suicide. If an individual experiences intensive and chronic pain and feels that the pain will never be allayed in the future, hopelessness ensues and the individual may consider suicide. This view is supported by Britton, Duberstein, Conner, Heisel, Hirsch and Conwell (2008) who found that hopelessness is related to SI especially among adults who have lost reasons for living. Someone in pain but with hope for a better future will continue to engage with life. Likewise, someone who feels hopeless about the future but live without pain will not feel suicidal. The second condition for suicide is connectedness. In a broad sense connectedness can mean connection to other people as well as to an interest, role, project, or any sense of purpose or meaning that keeps one invested in living (Klonsky & May, 2015). 3ST stipulates that someone who experiences pain and hopelessness and considers suicide will only have moderate ideation if connectedness remains greater than the pain but when pain exceeds connectedness SI and consequent suicide becomes imminent. The third condition is suicide capacity and it entails an individual's ability to commit suicide which is engendered by the two previous conditions. Therefore, following this theoretical postulation, market demolition can be viewed as a source of pain which stimulates hopelessness in the individuals involved and which has a likelihood of activating suicidal thoughts or ideation. The likelihood of suicide in this case is dependent on whether the traders have significant people to lean on and whether the trader still has the capacity to focus on other interests or could still retain a sense of purpose in life.

METHOD

Participants

The participants comprise 400 Market traders within the age range of 18 to 55 years, with the mean age of 33.81 and standard deviation of 8.17. The participants were made up of 200 males and 200 females respectively and were selected using convenient sampling technique from four different Markets in Owerri Municipal comprising Eke-Ukwu Market (102 participants), Relief Market (98 participants), Alaba Market (149 participants) and World Bank Market (51 participants). It involved administering the questionnaire items to any trader found in the markets selected for the study. In the course of the study, the researchers selected both traders whose shops were demolished and those whose shops were not demolished in order to compare the two groups in terms of PTSD and SI.

Instruments

Two instruments; the Posttraumatic Stress Disorder scale (PKS) by Keane (1984) and Psych Ache Scale (PAS) developed by Holden, Metha, Cuningham and Meleod (2001) were used in this study. The PKS was utilized in this study for the measurement of posttraumatic stress disorder. It is made up of forty six items having two response options (true = 1 point and false = 0). Participants are instructed to respond based on how they describe themselves and their activities. Keane (1984) validated the test using American samples and it produced a Cronbach Alpha of .93 for both males (n= 50) and females (n= 53). Ayonuwe (2003) adapted it to Nigerian participants and derived a test-retest reliability coefficient of .97 for both male and female participants (N= 100). It produced a concurrent validity of .80 when compared with Somatisation subscale of symptom checklist by Derogatis, Lipman and Covi (1977). The norm for the scale is 30 and scores higher than the norm indicate PTSD while scores lower than the norm indicate its absence. The second instrument –PAS was developed by Holden, *et al.*, (2001) and is used for the measurement of SI. It contains thirteen (13) items scored directly on five (5) point Likert format ranging from 1- Strongly Disagree to 5-Strongly Agree. Holden *et al.*, (2001), provided the psychometric properties for Canadian Sample while Orieka, (2004) provided for Nigerian Samples. Holden *et al.*, (2001) reported that SI has a concurrent validity coefficient of .52 and .30 with suicide ideation and suicide attempt subscales of Suicidal Manifestation Questionnaire, (SMQ) by John and Holden (1997). They also obtained a 2-week test-retest coefficient of .40. Orieka (2004) obtained a validity of .34 for hostility aggression and .33 for emotional unresponsiveness. The norm for the scale is 30.66 and scores higher than the norm indicate SI while scores lower than the norm signals its absence. The researchers also added a demographic section that enabled them to find out participants' gender, age and market demolition status i.e. whether the participant's shop was demolished or not. Information gathered from this section was used to classify market demolition (demolition and no demolition) and gender (male and female).

Procedure

Two scales (PAS and PKS) were administered to four hundred and fifteen (415) participants from four markets in Owerri comprising Eke-Ukwu, Relief, Alaba and World Bank markets. The convenient sampling technique was chosen for the selection of participants because of the transient nature of the market traders which made it difficult for the researchers to assemble the traders in a particular location so as to engage in random selection. Before data collection, the consent of the participants was sought and they were assured of confidentiality and informed that the information sought is strictly for research purposes. Also, after data collection, they were informed to report to the researcher if they experienced any negative feelings or mood changes in the process of responding to the questionnaires administered. None of the participants indicated such feelings so the need for treatment or debriefing did not arise. For the purpose of beneficence, the researchers promised to relay the outcome of the study to the participants upon completion. When data was collected, the following questionnaires from the sampling settings were discarded: Eke Ukwu market(4 questionnaires), Relief market (3). Alaba market (6) and World Bank market (2). Out of this number, 11 were incomplete and 4 were not returned amounting to a total of 15 un-used questionnaires. Thus 400 questionnaires were used for data analysis.

Design and Statistics

The study utilized a cross-sectional survey research design involving two levels of Market demolition (demolition and no demolition) and gender (males and females). Cross-sectional design was utilized and Multivariate Analysis of Variance (MANOVA) statistic derived from SPSS version 21 was used to analyze the data generated. The Multivariate Analysis of Variance (MANOVA) statistic is used because this study involves multiple dependent and independent variables. Anderson (2003) asserts that the MANOVA is capable of combining the multiple dependent variables in a linear manner to generate a combination which best separates the independent variable groups.

RESULTS

Table I: Means and Standard Deviations (SD) scores of PTSD and SI

Variables		Mean	SD	Mean	SD	N
Market	Experienced of Demolition	27.12	5.55	45.68	11.20	243
Demolition	No Experienced of Demolition	24.92	5.89	27.56	6.98	157
Gender	Male	25.95	5.59	38.15	13.65	200
	Female	26.44	5.94	39.19	12.69	200

Table 1 above indicates the mean and standard deviation scores of posttraumatic stress and SI on the two levels of the independent variables: market demolition and gender. The result shows that traders who experienced demolition have considerably higher mean score on PTSD (M = 27.12, SD = 5.55) than those who had no experience of demolition (M = 24.92, SD = 5.89). Again, in terms of SI, those whose shop were demolished indicated higher mean

score ($M = 45.68$, $SD = 11.20$) than those whose shops were not demolished ($M = 27.56$, $SD = 6.98$). Also, female participants indicated a fairly higher mean score ($M = 26.44$) in posttraumatic stress than their male counterparts ($M = 25.95$). Similarly, females have fairly higher mean score ($M = 39.19$) than males ($M = 38.15$) in terms of SI.

Table II: Summary of Multivariate Analysis of Variance (MANOVA): Tests of between subject effects of the independent factors on PTSD and SI.

Source	Dependent Variable	Sum of Squares	df	Mean Squares	F	Sig
Demolition (A)	Posttraumatic Stress	419.36	1	419.36	12.92	.000
	Suicidal Ideation	31413.58	1	31413.58	329.3	.000
Gender (A)	Posttraumatic Stress	20.88	1	20.88	.644	.423
	Suicidal Ideation	192.11	1	192.11	2.11	.157
A X B	Posttraumatic Stress	5.89	1	5.89	.182	.670
	Suicidal Ideation	25.95	1	25.95	.272	.602
Error	Posttraumatic Stress	12844.1	396	32.43		
	Suicidal Ideation	37780.12	396	95.41		
Total	Posttraumatic Stress	287870.00	400			
	Suicidal Ideation	69315.89	400			

$P < .05$

Result from the table above indicates that market demolition significantly influenced posttraumatic stress among market traders in Owerri Municipal [$F(1,400) = 12.93$, $p < .05$] and it confirmed the first research hypothesis. Also from the table above, the hypothesis that market demolition will significantly influence SI among market traders in Owerri Municipal was confirmed [$F(1,400) = 329.27$, $p < .05$], this indicates a nexus between the two variables.

However, the result indicates that no significant difference exist between male and female traders in terms of PTSD [$F(1,400) = .64$, $p > .05$] and that gender did not significantly influence SI among market traders in Owerri Municipal [$F(1,400) = 2.02$, $p > .05$]. This shows that gender has no influence on the dependent variables.

Furthermore, the results indicate no significant interaction effect of market demolition and gender on PTSD among market traders in Owerri Municipal [$F(1,400) = .18$, $p > .05$] as well as insignificant interaction effect of market demolition and gender on SI [$F(1,400) = .27$, $p > .05$].

DISCUSSION OF FINDINGS

The first finding of the study that market demolition influenced PTSD among traders in Owerri is supported by some studies; even though owing to dearth of studies, these findings are not directly connected to market demolition but concern different traumatic events or

experiences that triggered PTSD including combat or war related experiences (Solberg, Birkeland, Blix, Hansen, & Heir, 2016; Shaar, 2013; Spiro, Schnurr, & Aldwin, 1994) natural disasters (Geonjian *et al.*, 1994) torment of political prisoners (Lavik, Hauff, Skrondal, & Solberg, 1996; Richards, Ospina- Duque, Barrera-Valencia, Escobar-Rincon, Ardila-Gutierrez, Metzler, & Marmar, 2011) and the traumatic experiences of children who observed the demolition of their house (Popova, & Burnazova, 2018) as well as the traumatic experiences of people in a country devastated by political and religious conflict (Canetti, Galea, Hall, Johnson, Palmieri & Hobfoll, 2010; Macksoud & Aber, 1996; Weine *et al.*, 1995). All these situations share a commonality with market demolition- the people involved experienced an extremely traumatic situation in which they felt that their life were threatened (Halgin & Whitbourne, 2000). Thus the most plausible explanation to this finding is that the traders were exposed to stressful live events and traumatic experiences, which preoccupied their mind, created confusion, and brought about feelings of hopelessness, tension, and anxiety. Some of them witnessed excruciating situations like the death of the 10-year old boy, Somtochukwu Ibeanusi, who was shot by military men involved in the demolition exercise and the merciless beatings of many resistant traders by the police, army and government touts.

The second finding was that market demolition has significant influence on SI of traders in Owerri. This finding is in line with the study by Asgeirsdottir, Valdimarsdottir, Porsteinsdottir, Lund, Tomasson, Nyberg, Asgeirsdottir and Hauksdottir (2018) who found a significant association between suicidality and a host of non- interpersonal and interpersonal traumatic life events. Also, Panagiotti, Gooding and Tarrier (2012) found that suicidal behaviour is experienced by trauma victims and is significantly associated with hopelessness and defeat. Market demolition is likely to have triggered hopelessness and defeat in the traders leading to SI. Thus, the reason for this finding is that the demolition of the source of livelihood of these traders without provision of an alternative triggered grief, frustration, leading to hopelessness and resignation to fate. Hopelessness is viewed as major requirement for the development of SI (Klonsky & May, 2015; Britton, Duberstein, Conner, Heisel, Hirsch & Conwell 2008). This finding is discordant with the finding by Krug, Kresnow, Peddicord, Dahlberg *et al.*, (1998) who found that suicide rates remained constant after natural disasters.

The third finding of the study was that male and female participants showed no significant difference in terms of PTSDis line with a study by Shaar (2013) who found no gender differences in PTSD among adolescents. However the finding is discordant with many studies (Olf, 2017; Kobayashi & Delahanty, 2013; North, Oliver, & Pandya, 2012; Doron-Lamarca, Vogt, King, King & Saxe 2010; Tolin & Foa, 2008). For example, Olf (2017) reported that the lifetime prevalence of PTSD is about 10-12% in women and 5-6% in men. One plausible explanation for the finding of this present study is that the participants are Nigerians but the people who partook in the other studies are mostly from Euro-American countries. In Nigeria, males seem to be exposed to more traumatic events given the culturally imposed responsibility to them as breadwinners. Similarly, gender was found to have an insignificant influence on SI and this finding is inconsistent with most studies (Jibum--Kima, Yun-Suk Leeb & Jinkook-Leec, 2016; Sisodia, Devendra & Singh, 2015;

Bjerkeset, Romundstad, Gunnell, 2008) which seem to emphasize that females experience suicidal thoughts more than their male counterparts. However, Bjerkeset *et al.*, (2008), found that suicide is higher among men. The present study is supported by a number studies which found no gender differences in suicide (Bejerkesert, 2008; Weiss, 2016). The reason for this finding is that suicidal thoughts in Nigeria appear to be triggered by environmental stressors like hardship and poverty, disordered and unstable society that does not allow youths and adults to plan their lives and a plethora of existential challenges imposed by a government that appear indifferent to the needs of its people. These factors affect males and females alike.

The implications of this study are grave. The nexus between market demolition on the one hand, and SI and PTSD on the other, imply that carrying out such activity without proper planning for relocation of the traders is dangerous to people's psychological wellbeing. The above presupposes that many Nigerians are living lives of frustration, hopelessness, homeless, anxiety and depression. This also gives insight into the reason behind an upsurge of people living with PTSD and SI in Imo State, Nigeria. In the same vein, the third and the fourth hypotheses that asserts that there is no gender difference in the extent of posttraumatic stress and SI, indicates that gender has no influence on these variables.

Recommendations

It is recommended that government of all states and even the federal government make calculated and detailed policy plan targeted at provision of alternative markets and other palliative measures to handle the shock of relocation before demolition of markets. Also, psychotherapists, counsellors and social workers in Africa should factor in traumatic events like market demolition in the etiological chain of PTSD and SI.

Conclusion

This study examined the influence of market demolition and gender on PTSD and SI among market traders in Owerri, thus contributing to research on traumatic events, gender and suicidal ideation. Through its findings, the study has demonstrated the link between market demolition, PTSD and SI; thereby adding market demolition as one of the activating events of PTSD and SI. Contrary to previous western studies, our paper did not find any significant gender difference on PTSD and SI. Following our findings, most events that trigger PTSD and SI in Nigeria are environmental factors and socio-economic disorderliness which knows no gender. It has confirmed the devastating impact of market demolition and the need for proper planning of relocation and humane approach if any market is to be demolished. It has also confirmed that cataclysmic events like market demolition play roles in the aetiology of PTSD and SI. Further studies should investigate the impact of market demolition and gender on other psychological disorders like generalized anxiety, acute stress and depressive disorders. The study's limitations border on its inability to infer causality and the modest sample size.

REFERENCES

- American Psychiatric Association (2000), Diagnostic and statistical manual of mental disorder fourth edition, *text revision (DSM-IV-TR)*, Washington DC: American Psychiatric Association.
- Anderson, T. W. (2003). *An Introduction to Multivariate Statistical Analysis*. New York: Wiley Inc.
- Asgeirsdottir, H. G., Valdimarsdottir, U. A., Porsteinsdottir, P. K., Lund, S. H., Tomasson, G., Nyberg, U., Asgeirsdottir T. L., & Hauksdottir A. (2018). The association between different traumatic life events and suicidality. *European journal of psychotraumatology*, 9, 151-279. doi 10.1080/20008/98.2018.1510279
- Ayonuwe, T. M. (2003). Assessment and management of posttraumatic stress reaction among bomb blast victims. *Unpublished M.Sc. Research Project, Department of Psychology, University of Lagos*.
- Bertolote, J. M., & Fleishman, A, (2005), Suicidal behavior prevention: WHO perspectives on research. *American journal of medical Genetics*, 13 (3), 8-20.
- Bjerkeset O, Romundstad P, Gunnell D (2008) Gender differences in the association of mixed anxiety and depression with suicide. *British Journal Psychiatry* 192: 474-475.
- Britton, P. C., Duberstein, P. R., Conner, K. R., Heisel, M. J., Hirsch, J. K., & Conwell, Y. (2008) Reason for living, Hopelessness and SI among depressed adult 50 years or older. *American Journal Geriatric Psychiatry*, 16(9), 736-741 .doi: 10.1097/JGP.0b013e31817b609a.
- Canetti, D., Galea, S., Hall B. J., Johnson, R. J., Palmieri, P. A., & Hobfoll, S. E. (2010) Exposure to prolonged socio- political conflict and the risk of PTSD and depression among Palestinians. *Psychiatry*, 73(3): 219-231. doi:10.1521/psyc.2010.73.3.219.
- Center for Disease Control and Prevention. (2017). 10 leading causes of death by age group, United States–2015. Retrieved on August, 17th 2018 from <http://www.cdc.gov/>
- Davidson, J. R. T., & Foa, E. B. (1991). Diagnostic issues in posttraumatic stress disorder: Considerations for the DSM-IV. *Journal of Abnormal Psychology*, 100(3), 346-355.
- Derogatis, L. R., Lipman, R. S., & Covi, L. (1977). *SCL – 90R: Administration scoring and procedures manual*. Baltimore: John Hopkins University School of Medicine, Clinical Psychometric Research Unit
- Doron-LaMarca, S., Vogt, D. S., King, D. W., King, L. A., and Saxe, G. N. (2010). Pre-trauma problems, prior stressor exposure, and gender as predictors of change in posttraumatic stress symptoms among physically injured children and adolescents. *Journal of Consulting and Clinical Psychology*, 78(6), 781-793.
- Ellis, A. (1962). *Reason and emotion in psychotherapy*. Secaucus, New Jersey: Citadel.

- Ellis, A. (2001). *Overcoming destructive beliefs, feelings, and behaviours*. Amherst, New York: Prometheus Books.
- Ellis, A. (2008). Rational emotive behaviour therapy. In R. J. Corsini & D. Wedding. *Current psychotherapies*. Australia: Thomson Brooks/Cole. pp; 187-222.
- Ellis, A., & MacLaren, C. (1998). *Rational emotive behaviour therapy: A therapist's guide*. Atascadero, CA: Impact Publishers.
- Halgin, R. P., & Whitbourne, S. K. (2000). *Abnormal Psychology: Clinical perspectives on Psychological disorders*. (3rd Ed). Boston: McGraw-Hill.
- Hawka, J., Suominen, K., Partonen, T., & Lonnquist, J. (2008). Determinants and outcomes of serious attempted suicide: A nationwide study in Finland, 1996-2003, *American Journal of epidemiology*, 167 (5), 5-11.
- Holden, R. R., Mehta, K. Cuminghan, E. J. & Mcleod, L. D. (2001). Development and preliminary validation of a scale of psychache. *Canadian Journal of Behavioural Science*, 33 (4), 224-232.<http://dx.doi.org/10.1037/0021-843X.100.3.346>
- Keane, T. M., & Kaloupek, D. G. (2002). Diagnosis, assessment and monitoring outcomes in PTSD. In R. Yehuda (Ed), *Treating trauma survivors with PTSD* (pp, 21-42). Washington, DC: American Psychiatric Press.
- Keane, T. M., Malloy, P. F., & Fairbank, J. A. (1984). Empirical development of an MMPI subscale for the assessment of combat-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 52(5), 888-891. <http://dx.doi.org/10.1037/0022-006X.52.5.888>.
- Kimerling, R., Gima, K., Smith, M. W., Street, A. & Frayne, S. (2007). The Veterans health administration and military sexual trauma. *American Journal of public Health*, 97, 2160-2166. <http://dx.doi.org/10.2105/AJPH.2006.092999>.
- Klonsky, E. D., & May, A. M. (2015). The Three-Step Theory (3ST): A new theory of suicide rooted in the “ideation-to-action” framework. *International Journal of Cognitive Therapy*, 8(2), 114-129.<http://dx.doi.org/10.1521/ijct.2015.8.2.114>
- Krug, E. G., Kresnow, M., Peddicord, J. P., Dahlberg, L. L., Powell, K. E., Crosby, A. E., & Annet, J. L., (1998). Suicide after natural disasters. *New England Journal of Medicine*, 338, 373-378.[doi:10.1056/Nejm199802053380607](https://doi.org/10.1056/Nejm199802053380607).
- Langlois, S., & Morrison, P. (2002) *Health Reports*, Vol. 13, No. 2, January..... Data source: World Health Organization database (*Reference 11*).
- Lavik, N. J., Hauff, E., Skrondal, A., & Solberg, O. (1996). ‘Mental disorder among refugees and the impact of persecution and exile: Some findings from an out-patient population’. *British Journal of Psychiatry*, 169(6), 726-732.
- Macksoud, M. S., Aber, J. L., & Cohn, I. (1996). Assessing the impact of war on children. In R. J. Apfel & B. Simon (Eds.), *Minefields in their hearts: The mental health of children in war and communal violence* (pp. 218-230). New Haven, CT, US: Yale University Press.

- McAuliffe, C. M. (2002). SI as an articulation of intent: A focus for suicide prevention. *Archives of Suicide Research*, 6, 325-338.
- McNally R. J. (2005). *Conceptual problems with the DSM-IV criteria for posttraumatic stress disorder – issues and controversies*. John Wiley and Sons, Ltd.
- Navaneelan, T. (2012). Suicide rates: An overview. *Statistics Canada*. Retrieved on 24th June, 2019 from <http://www.statcan.gc.ca/pub/82-624-x/2012001/article/11696-eng.htm>.
- Nock, M. K., Borges, G., Bromet, E. J., Cha, C. B., Kessler, R. C., & Lee, S. (2008). Suicide and suicidal behaviour. *Epidemiology Review*, 30, 133-154.
- North, C. S., Oliver, J & Pandya, A. (2012), Examining a comprehensive model of disaster-related posttraumatic stress disorder in systematically studied survivors of 10 disasters *American Journal of Public Health*, 102 (10) , 40-48.
- Okodili, N. (2017). The Nation, September 9, in *news update, Saturday magazine*. (pp. 13:14)
- Okon, D. (2019). Addressing the exponential rates of suicide in Nigeria. *Business Day*, August 18.
- Olf, M. (2017). Sex and gender differences in posttraumatic stress disorder: *European Journal Psychotraumatology*, 8 (4) 135 -204 .doi:10.1080/20008198.
- Orieka, J.O. (2003) Development and standardization of the personal rejection distress scale. *Unpublished Ph.D. Research Monograph*, Department of Psychology, University of Lagos.
- Panagisti, M., Gooding, P. A., Tarrier, N. (2012) Hopelessness, defeat and entrapment in Posttraumatic stress disorder: their association with suicidal behaviour and severity of depression. *Journal of Nervous Mental Disorder*, 200 (8), 676-83. doi:10.1097/NMD.ob013e3182613f91.
- Popova, O., Koval, L., Horetska, O., Serdiuk, N., & Burnazova, V. 2018 Jul 2. Theoretical and Practical Aspects of Psychological and Pedagogical Support for Children and Adolescents Temporarily Displaced from the Territories of Permanent Residence. *Journal of History Culture and Art Research*. [Çevrimiçi] 7:2
- Pritchard, C., & Hansen, L. (2005). Comparison of suicide in people aged 65–74 and 75+ by gender in England & Wales and the major Developed countries. *International Journal of Geriatric Psychiatry*, 20, 17–25.
- Rahman, S., Alexanderson, K., Jokinen, J., Mittendorfer- Rutz, E. (2014) Risk factors for suicidal behavior in individuals on disability pension due to common mental disorder.
- Revich K. I, Seligman, M. E. P., & McBride, S. (2011). Master resilience training in the U.S. Army. *American Psychologist*, 66, 25-34.
- Richards, A., Ospina- Duque, J., Barrera-Valencia, M., Escobar-Rincon, J., Ardila-Gutierrez, M., Metzler, T., & Marmar C. (2011). Posttraumatic stress disorder,

- anxiety and depression symptoms, and psychosocial treatment needs in Colombians internally displaced by armed conflict: A mixed-method evaluation. *Psychological Trauma: Theory, Research, Practice and Policy*, 3 (4), 384-393.
- Schrijvers, D L., Bollen, J., Sabbe, B. G. C. (2011). The gender paradox in suicidal behavior and its impact on the suicidal process. *Journal of Affective Disorders*. 138, 19-26. doi:10.1016/j.jad.
- Shaar, K. (2013). Posttraumatic stress disorder in adolescents in Lebanon as wars gained in ferocity: a systematic review. *Journal of Public Health Research*, 2 (2), e17. <https://doi.org/10.4081/jphr.2013.e17>.
- Sisodia Devendra Singh BN Girls college, M.L.S University, Udaipur (April, 2015), *Life satisfaction as a parameter of suicide among youth. Journal of Contemporary Psychological Research*, (2), 2349-5642.
- Skinner B. F. (1953). *Science and human behaviour*. New York: Simon & Schuster.
- Solberg, O., Birkeland, M .S., Blix, I., Hansen, M. B., & Heir T. (2016). Towards an exposure- dependent model of posttraumatic stress: longitudinal course of posttraumatic stress symptomatology and functional impairment after the 2011 Oslo bombing. *Psychological Medicine*. 46, 3241-3254. doi: 10.1017/S0033291716001860.
- Solomon, Z. Horesh, D., and Ein-Dor, T. (2009). The longitudinal course of posttraumatic stress disorder symptom clusters among war veterans. *Journal of Clinical Psychiatry*, 837(2) 10,4088/jcp.
- Spiro, A., Schnurr, P. P., & Aldwin, C.M. (1994). Combat-related post-traumatic stress disorder symptoms in older men. *Psychology and Aging*, 9, 17-26.
- Stein, D. J., Blanco, C & Friedman M. J. (2011) preface. In Stein DJ, Friedman M.J., and Blanco C (eds): *posttraumatic stress disorder*, xi-xiii, Wiley- Blackwell, Oxford.
- Tidemalm, D., Haglund, A., Karanti A., London M., Runeson, B. (2014) Risk factors in a Cohort of 6086 patients plos one 9 (4) e94097, doi: 10.1371/journal.PONE.0094097.
- Tolin, D. F., & Foa, E. B. (2008). Sex differences in trauma and posttraumatic stress disorder: A quantitative review of 25 years of research. *Psychological Trauma: Theory, Research, Practice and Policy*, 1, 37-85.
- UN-Habitat (2018). *The state of Africa cities: governance, inequality and urban land and market*. Abuja, Nigeria.
- Weine, S. M., Becker, D. F., McGlashan, T. H., Laub, D., Lazrove, S., Vojvoda, D., Hyman, L. (1995). Psychiatric consequences of “ethnic cleansing”: Clinical assessments and trauma testimonies of newly resettled Bosnian refugees. *American Journal of Psychiatry*, 152, 536-542.
- Weiss SJ, Muzik M, Deligiannidis KM, Ammerman RT, Guille C, et al. (2016) Gender Differences in Suicidal Risk Factors among Individuals with Mood Disorders. *Journal of Depression and Anxiety*, 5, 218. doi:10.4172/2167-1044.1000218

Wittchen, H. U., Jacobi F. (2009) Size and burden of mental disorders in Europe: A critical review and appraisal of 27 studies. *European Neuropsychopharmacology*. 15(4):357–376. DOI: 10.1016/j.euroneuro.2005.04.012.

World Health Organization (2013). Projections of mortality and causes of death 2015 and 2030. Geneva: WHO. Retrieved on August, 16th 2018 from <http://www.who.int/http://healthinfo/global-burdedisease/projections/en/>

World Health Organization (2014). Preventing suicide: Global imperative. Retrieved on June 23, 2019 from [Genrva;http://apps.who.int/iris/bitstream/10665/131056/1/9789241564779-eng.Pdf](http://apps.who.int/iris/bitstream/10665/131056/1/9789241564779-eng.Pdf).

World Health Organization (2018). Suicide rates, age standardized data by country. Retrieved on June 12, 2019 from <https://web.archive.org/web/20180117045516/http://apps.who.int/gho/data/node.main.mhsuicideasdr?lang=en>

World Health Organization [WHO] (2018). Suicide. Retrieved on 22 June 2019 from: <http://www.who.int/news-room/fact-sheets/detail/suicide>