ASSESSING THE EFFICACY OF NARRATIVE EXPOSURE THERAPY ON PSYCHOLOGICAL TRAUMA AMONG INTERNALLY DISPLACED PERSONS IN JOS PLATEAU STATE, NIGERIA

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A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, NASARAWA STATE UNIVERSITY KEFFI, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF DOCTOR OF PHILOSOPHY DEGREE IN CLINICAL PSYCHOLOGY

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DECLARATION

I hereby declare that this thesis has been written by me and it is a report of my research work. It has not been presented in any previous application for the Doctor of Philosophy Degree in Clinical Psychology. All quotations are indicated and sources of information specifically acknowledged by means of reference.

_____

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CERTIFICATION

This is to certify that this thesis titled **"**The efficacy of narrative exposure therapy on Psychological Trauma among Internally Displaced with Persons Post-Traumatic Stress Disorder in Jos, Nigeria**"** meets the regulations governing the award of Doctor of Philosophy in Clinical Psychology of the school of Postgraduate Studies, Nasarawa State University, Keffi, and is approved for its contribution to knowledge.

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DEDICATION

I dedicate this work to God almighty and my family.

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ABSTRACT

This study carried out an assessment the efficacy of narrative exposure therapy on psychological trauma amongst internally displaced persons with post-traumatic stress disorder in Nigeria. The between group experimental design was adopted for the study. A total of 24 Internally Displaced Persons (IDPs) comprising 8 males and 16 females were randomly selected and randomized into two groups of 12 in each group. Four hypotheses were tested with the one-way Analysis of Variance (ANOVA). The findings for hypothesis 1 revealed that Narrative Exposure Therapy (NET) had a significant effect on psychological trauma among IDPs with Posttraumatic Stress Disorder (PTSD), F (1, 22) = 15.303, p = 0.001 (p<.05); with participants exposed to NET with significantly lower levels of psychological trauma than the control group. This implies that NET is an efficacious treatment for individuals with Psychological trauma. The results of hypothesis 2 indicated that there was no significant gender differences in the efficacy of Narrative Exposure Therapy (NET) on Internally Displaced Persons (IDPs) psychological trauma suffering from PTSD, F (1, 10) = 2.077, p = 0.180 (p>.05) and the hypothesis was therefore not upheld. The outcome of the ANOVA for hypothesis 3 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. The outcome of hypothesis 4 revealed there were no significant differences on the impact of NET on participants in higher level of education and lower level of education. The hypothesis was therefore rejected with, F (2, 9) = 0.389, p = 0.689 (p>.05). In conclusion, this study demonstrated that Narrative Exposure Therapy had positive effects on participants' psychological trauma. As there were remarkable reduction in symptoms after 4weeks of treatment among the participants' compared to the control group whose symptoms rather got elevated. The implications for further studies in randomized trials and for national policy frame work on the psychological treatment of trauma were discussed.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Nigeria has witnessed recurring political, ethnic and religious conflicts since the exit of the Armed Forces from military rule in 1999, with the North Central region, being one of the areas worst hit (Idahosa & Akor, 2013) .This in turn has brought about an increase in Internally Displaced Persons (IDPs). Plateau State, especially Jos, has witnessed several of such conflicts since 2001, with varying reports on the number of deaths, depending on the source (Integrated Regional Information, 2010). The Internal Displacement Monitoring Centre (IDMC) estimates that there are almost 2,152,000 IDPs in Nigeria as of 31st December, 2015 (IDMC, 2016). This figure is based on an assessment conducted from November to December 2015 by the International Organization for Migration's (IOM) Displacement Tracking Matrix (DTM) team in 207 Local Government Areas (LGA) covering 13 States of Northern Nigeria: Abuja, Adamawa, Bauchi, Benue, Borno, Gombe, Kaduna, Kano, Nasarawa, Plateau, Taraba, Yobe, and Zamfara (IOM/NEMA, 2015). The estimated number of IDPs in Plateau state was put at 77, 317 (IOM/NEMA, 2015).

Physical assaults, life threatening injury, death of closely related persons and loss of property are among the traumatic events experienced in a mass conflict situation. A wide range of neuro-psychiatric disorders may be consequent upon these traumatic experiences, with Post-Traumatic Stress Disorder (PTSD) being the most common psychological disorder (Caffo & Balaise, 2003). This disorder occurs after witnessing death of a loved one or

experiencing events that are threatening or serious injury that invokes intense feelings of fear, helplessness, or horror, resulting in fear-related hyper arousal, avoidance and intrusion symptom clusters, associated with functional impairment in important areas of life (American Psychological Association DSM-IV, 1994). If left untreated, the condition may become persistent with an enormous health care expenses and financial losses (Kessler, 2000).

Posttraumatic stress disorder can impinge on people of all gender, ages and culture (Hall, Elhai, Grubaugh, Tuerk & Magruder, 2012), but women are more likely than men to develop PTSD. Seng, Clark, McCarthy and Roni, (2006) and Kessler, Sonnega, Bromet andNelson (1995) in their studies across countries have shown a wide range of PTSD prevalence. While some studies reported current levels of PTSD, others assessed for PTSD over the course of a life time (Haword & Andrew, 2008). The rates of PTSD in the general population across countries, range from none in Switzerland (Hepp, Gamma, Milos, Eich, Ajdacic-gross & Rossler (2006) to7.8% in the United States (Kessler et.al,1995)and as high as 37.4% in post conflict countries (De Jong, Komproe, Ommeren , Masri , Araya & Khaled 2001). In the Middle East, the life time prevalence of PTSD varied from less than 1% in Iran (Mohammadi, David, Noorbala, Malekafzali, Naghavi & Pouretemad; 2005) to17.4% in Gaza strip (De Jong et.al, 2001)

In Africa, prevalence rates of PTSD are also high and range from17.4% in Ethiopia to 33.4% in Algeria (De Jong et. al., 2001) while 23.2% - 80% was documented among conflict survivors in Libya, (Charlson, Fiona, Steel, Zachary, Degenhardt & Louisa, 2012), in Uganda, (Bayard, Kaducu, John, Thomas & Egbert, 2008) and Southern-Sudan (Ayazi , 2012). Nigerian studies also reported similar high rates among community samples, ranging from 41%

(Obilom&Thatcher,2008) to 60% six-month period prevalence of PTSD in the Niger Delta region (Beiser, Wiwa & Adebajo, 2010) and current prevalence of PTSD in Jos 46.1% (Tagurum, Chirdan, Obindo, Bello, Afolaranmi, Hassan & Yilgwan, 2015).

Though trauma exposure is a necessary component of PTSD, but whether or not people will develop PTSD depends on their subjective perception of the traumatic event acting together with various risk factors to promote the development of the disorder (Yehuda et. al. 1995; Bresla et. al. 1999). Posttraumatic stress disorder may become one among the most significant health concerns of the century because of the rising prevalence of turmoil the world over and Nigeria being a low income country with a variety of unresolved political, ethnic and religious conflicts and the after effect of such conflict are mental illnesses such as; anxiety disorder, depression and post-traumatic stress disorder. Despite these, there is a dearth of studies regarding the use of psychological therapy as treatment for posttraumatic stress disorder (PTSD) amongst internally displaced persons in Nigeria. This study aims to fill in this gap by assessing the efficacy of Narrative Exposure Therapy (NET) among internally displaced persons diagnosed with PTSD in Jos, Plateau state.

1.2 Statement of the Problem

The term Internally Displaced Persons (IDPs) and issues associated with it was new to Nigerians before the advent of Civilian Rule in May 1999, because reports have always focused on place or community of attacks and the on the spot number of deaths, injured or physically ill, but not the internally displaced persons suffering from the aftermath of such planned or unplanned violence. Apart from the ethno-religious crisis, Boko Haram insurgency, a recent violent

crisis is the incessant conflict between the farmers and Fulani herdsmen in Nigeria. Abimaje, Augustine, Nadi, Ayado and Ismail (2014) observe that the security problems in Nigeria is creating more internally displaced people every day as more people continue to either feel endangered or dislodged from their homes or places of abode.

The effect of such conflict is displacement of persons making them residing in temporary camps. Women are extremely vulnerable to physical and mental health problems, (Owoaje, Uchendu, Ajayi & Cadmus, 2016). A number of studies have also reported that women and girls were victims of physical and sexual violence in IDP camps (Mooney, 2005) .Women are at higher risk of maternal morbidity and mortality, unwanted pregnancies and unsafe abortions, Amowitz et al (2002), Ellsberg etal (2008). The negative impacts of sexual violence are significant and long term. These may include unwanted pregnancies, sexually transmitted infections including HIV, physical injuries and mental health effects (Austin,et al 2008; McLean,et al 2011). While the men are left with the option of scouting to provide for the family with the elderly having to wait on what fate have to offer. Apart from physical mortality, mass violence is associated with psychological morbidity (Norris, Friedman & Watson, 2002), because it shatters the fundamental beliefs of vulnerability, mortality and human nature, thereby leaving survivors of the trauma with a wide range of PTSD symptoms. PTSD remains a major mental health problem that may occur in a period of increasing violent conflicts, with persistent symptoms, particularly among IDPs. Due to the effects of PTSD on the well-being of the affected persons, their productivity reduces and the socio-economic development of the nation is at a disadvantage.

Although efforts by the government at all levels, non-governmental organizations (NGOs) and other public spirited individuals have been overstretched and the internally displaced persons are living in sub-human conditions, the absence of food, latrines and water supply has its implications on secondary challenges especially large scale catastrophic mental health consequences. Although in the north eastern part of the country the Federal Government recently flagged off the distribution of food, clothes and provision of other basic amenities that the internally displaced persons need in settlement, nothing was said on the psychological wellbeing of the internally displaced persons. The survivors of the horrific attacks are already exposed to scenes of unmitigated violence, widespread destruction of their property and unjustified killing of their loved ones. For example, an Investigation carried out by Dura, (2014) that reveals 32 IDPs died in a camp at LGEA Primary School, North Bank, Markurdi. By implication, the survivors of the attack were continuously experiencing post-displacement terrifying life events which can be considered traumatic. Compared to refugees, IDPs are one population that has not been well represented in psycho traumatology literature and mental health policy. North (2001) opines that IDPs in the world remain an undeserved and unrecognized population, with clearly unmet mental health needs.

There are few published studies on PTSD symptoms as a public mental health issue among IDPs population in Nigeria; and the needs assessment of the aftermath of such trauma does not incorporate psychological morbidity among survivors of the violent crisis. A comprehensive human impact management strategy for the survivors cannot be achieved without giving attention to the important mental health problem of PTSD. Hayes, VanElzakker & Shin,

(2012) suggested after their classical review of cognition and emotions interactions in PTSD that an important consideration in future research should be the extent to which individual differences and moderating factors impact the development of PTSD. For example, gender, age and level of education and some other variables might be the reason for susceptibility and defending factors in PTSD, therefore in fashioning out the psychosocial response strategies for the IDP population in Nigeria, psychological factors like cognitions and emotions of the affected persons deserve to be considered in understanding the individual differences in PTSD symptoms.

It is critical to discover possible moderators for intervention purposes (Busuito, Huth-Bocks & Puro, 2014, p.573: Chukwuorji, 2014). Against these backdrops and for the purpose of addressing the lack of knowledge of the public about PTSD, low level of research information on PTSD, dearth of empirical knowledge on contributions in the management and treatment of PTSD among IDPs, lack of policy data for PTSD and the psychological health of the IDPs in Nigeria. The present study intends to assess the efficacy of Narrative Exposure Therapy (NET) as a effective and efficient tool in the treatment of post-traumatic stress disorder of IDPS in camp.

1.3 Research Questions

The study puts forward the following research questions:

i. What is the effectiveness of NET on psychological trauma amongst IDPs with PTSD?

ii. Are there gender differences in the outcome of NET on psychological trauma among IDPs with PTSD?

iii. Are there age differences in the outcome of NET on psychological trauma among IDPs with PTSD?

iv. Are there educational differences in the outcome of NET on psychological trauma among IDPs with PTSD?

1.4 Objectives of the Study

The main objective of this study is to carry out an assessment of the efficacy of narrative exposure therapy on psychological trauma amongst internally displaced persons with PTSD at a camp in Jos, Plateau State Nigeria. The specific objectives of the study are:

i. To determine the effectiveness of NET on psychological trauma amongst IDPs with PTSD.

ii. To examine gender differences in the outcome of NET on psychological

trauma among IDPs with PTSD.

iii. To asses age differences in the outcome of NET on psychological trauma among IDPs with PTSD.

iv. To examine educational differences in the outcome of NET on psychological trauma among IDPs with PTSD.

1.5 Statement of the Hypotheses

The following hypotheses will be tested in the study:

1. Narrative Exposure Therapy (NET) will have a significant effect on psychological trauma among Internally Displaced Persons (IDPs) with PTSD.
2. There will be a significant gender differences in the efficacy of Narrative Exposure Therapy (NET) on Psychological trauma among IDPs with PTSD.

3. There will be a significant age differences in the efficacy of Narrative Exposure Therapy (NET) on Psychological trauma among IDPs with PTSD
4. There will be a significant differences in level of education on the efficacy of Narrative Exposure Therapy (NET) on Psychological trauma among IDPs with PTSD

1.6 Significance of the Study

The findings of the study will

i. Indicate the prevalence of PTSD among IDPs in camp
ii. Demonstrate the effectiveness of NET in the management of PTSD among IDPs
iii. Find out the determinants of the efficacy of NET in the management of PTSD
iv. Provide indicators for the provision of psychological service to internally displaced victims of trauma in camp.

1.7 Scope of the Study

The scope of this dissertation is limited to prevalence of PTSD among IDP in camp, demonstrate the effectiveness of NET in the management of PTSD among IDPs, efficacy of NET in the management of PTSD and provision of psychological service to internally displaced victims of trauma in camp.

1.8 Definition of Operational Terms

Narrative Exposure Therapy: is a treatment for trauma-spectrum disorders in survivors of multiple and complex trauma.NET builds on the theory of the dual representation of traumatic memories (Elbert&Schauer, 2002).

Thus, it is a form of exposure for clients with PTSD which encourages them to tell their detailed life history chronologically to someone who writes it

down, reads it back to them, helps them integrate fragmented traumatic memories into a coherent narrative, and gives that to them at the end as written testimony. Describing personal experiences in detail facilitates imaginable exposure to traumatic memories.

Psychological Trauma: As defined by the Centre for Treatment of Anxiety and Mood Disorder (2007), is the psychological or emotional response to an event or an experience that is deeply distressing or disturbing and everyone processes the traumatic event differently because we all face them through the lens of prior experiences in our lives. Also, it can be seen as a type of damage to the mind that occurs as a result of a severely distressing event. Trauma is often the result of an overwhelming amount of stress that exceeds one's ability to cope, or integrate the emotions involved with that experience.

Internally Displaced Persons (IDP): The Dictionary of Military and Associated Terms, 2005), defined internally displaced person as any person who has left their residence by the reason of real or imagined danger but has not left the territory of their own country. They are also people who are forced to flee their home but who remain within their country's borders. They are often referred to as refugees, although they do not fall within the legal definitions of a refugee

Post-Traumatic Stress Disorder *(*PTSD*):* According to the Centre for Treatment of Anxiety and Mood Disorder, 2007). PTSD can develop after a person has been exposed to a terrifying event or has been through an ordeal in which intense physical harm occurred or was threatened. Also it is a mental disorder that can develop after a person is exposed to a traumatic event, such as sexual assault, warfare, traffic collisions, or other threats on a person's life.

CHAPTER TWO

LITERATURE REVIEW

The chapter present the overview of key variables regarding psychological theories of post-traumatic stress disorders; specifically the behavioural, cognitive, and psychodynamic models. Furthermore, the chapter reviews empirical studies, beginning with a history of Post-Traumatic Stress Disorder (PTSD), Post-Traumatic Stress Disorder (PTSD) and traumatic events, prevalence of PTSD, PTSD among post-conflict and traumatized populations, risk factors for PTSD, mechanisms underlying PTSD, varying treatments for PTSD, and a summary of the review is presented.

2.1 Conceptual Framework

The key study variables that were overviewed include:

2.1.1 Narrative Exposure Therapy (NET)

Narrative Exposure Therapy (NET) is a growing and promising new intervention developed specifically for treatment of traumatic stress disorders after terror, torture, war and other forms of organized violence (Schauer, Neuner & Elbert, 2005). The therapy is originally designed as a manualized short-term intervention to meet pressing mental health needs of victims in emergency situations, such as refugee camps. Given the limited resources in refugee camps and other emergency situations, the therapy was also designed to be easily learned and delivered by lay staff without extensive training. Moreover, given that many cultures attach importance to oral tradition and there history telling, the "narrative" nature of this therapy is likely to be adaptable and palatable to clients from many cultures.

Narrative Exposure Therapy (NET) was developed as a fusion between traditional cognitive and behavioural methods and testimony therapy, which involves survivours of organized or un organized violence constructing detailed narratives of their experiences and story (Neuner, Schauer, Elbert, & Roth, 2002; Neuner, Schauer, Klaschik, Karunakara & Elbert, 2004).The unique mixture of exposure to traumatic cues within the context of a life time narrative integrates and embeds the traumatic experience into a structured autobiographical context. As such, the theory of NET is developed and informed by the theoretical understanding of the role of fear networks in and around the nature of traumatic memories.

In fact, researches have suggested that clients who are most likely to benefit from exposure are those who are able to synthesize organized coherent narratives of their traumatic experiences (Foa, Molnar, & Cashman, 1995), suggesting that habituation of the fear response and constructing a meaningful narrative may be equally important and complementary healing factors. Moreover some researchers propose that inhibiting the fear response and reducing PTSD symptoms requires a process that is more evaluative and complex than the simple habituation thought to occur in traditional exposure. In such a process, the automatic fear response is tempered by evaluating information about the current situation to assess its level of threat (LeDoux, 2000). This process is thought to incorporate traumatic memories, as memories about past events often provide context for evaluating current situations. Yet, the distorted and fragmented nature of traumatic memories, may interfere with the evaluative process and hence with the inhibition of the fear

response (Brewin, 2001: Schauer, Neuner, & Elbert, 2005). As such, targeting traumatic memories and seeking to organize them into a consistent narrative facilitates the process of exposure, which in turn aids in further processing of the traumatic memories.

Neuner, Schauer, Klaschik, Karunakara and Elbert (2004) had conducted the first trial of narrative exposure therapy with Sudanese refugees in Africa. The participants were 43 Sudanese refugees living in a settlement at Ugandan and were diagnosed with Post Traumatic Stress Disorder. Participants were randomized and exposed to 4 sessions of narrative exposure therapy, 4 sessions of supportive counselling, or 1 session of psycho-education. Supportive counselling focused on problem solving and enhancing individual and social resources. All sixteen (16) narrative exposure therapy clients participated in the study, while two (2) of the fourteen (14) clients in supportive counselling dropped out. On post treatment, narrative exposure therapy had a larger effect size than supportive counselling. Within the year following treatment, 93% of participants had experienced at least one additional traumatic event. However, only 29% of narrative exposure therapy participants still met criteria for PTSD, compared with79% and 80% of the supportive and psycho-education groups, respectively. Also, there was evidence that narrative exposure therapy participants had better living and social skills than the other two groups, as they were more likely to get employed and also move away to safer location. The findings recommend that even in the unstable location of a refugee settlement, where refugees either young or old are exposed to new traumatic events, and where other “instant” needs may also be wanting; a

brief psychological intervention in the camp may bring about significant relief of psychological trauma and PTSD.

Another study conducted by Neuner, Onyut, Ertl, Odenwald, Schauer and Elbert, (2008) also investigated whether trained lay counsellors in a refugee camp can effectively disseminate trauma related treatment to traumatized refugees in the camp. They randomized 277 Ugandan and Somalia refugees diagnosed with PTSD into one of three groups, which were: narrative exposure therapy, flexible trauma counselling, and a no treatment monitoring group. The flexible trauma counselling was a model of therapy that allowed counsellors trained in narrative exposure therapy to conduct therapy based on instinct without strictly following the manual. The counsellors for both groups were themselves refugees from the camp, and just about half met criteria for PTSD and were treated with narrative exposure therapy as part of their training. Eventually, two trauma treatment groups did not differ from each other and were superior to the no treatment group in reducing PTSD symptoms and physical health problems. At a 9-month follow-up, 37% of the no treatment group no longer met PTSD criteria, in contrast to 65% and 70% for the flexible trauma and narrative exposure therapy treatment groups, respectively. Furthermore, at 6-month follow-up, participants in both treatment groups had reduced physical symptoms, whereas participants in the no treatment group had increased physical symptoms. Finally, 4% of participants in narrative exposure dropped out, in contrast to 21% in the flexible counselling condition. The results signify that narrative exposure therapy and trauma counselling in general are effective in reducing distress and PTSD symptoms in a sample of

African refugees, and that trained lay counsellors in refugee camps can be a valuable resource in making treatment more widely available.

In a different trial which had randomized Rwandan orphans (age range 14-29, mean 19.4) that were diagnosed with PTSD into either four (4) sessions of narrative exposure therapy or a group adaptation of interpersonal therapy, findings in the narrative exposure group indicated that PTSD rates dropped from 58% at 3-month follow- up to 25% at 6-month follow-up; while 71% of the participants in the interpersonal therapy group continued to meet criteria for PTSD at both time points (Schaal, Elbert, & Neuner,2009).

Narrative exposure therapy though it was originally developed by Neuner etal, (2002) in a refugee settlement setting in Africa , the therapy is being more widely investigated in Western and advanced countries in present day. Refugees from other continent who are seeking asylum in Western countries may face their own sets of challenges such as possible discrimination, uncertainty regarding their legal status, and, loss of social status and support networks, struggles with acculturation and barriers in language. Four (4) trials have been conducted with narrative exposure therapy in advanced income European countries (Robjant & Fazel,2010) .While, Naser &Morina (2012), Hijazi (2014), Kangaslampi et al., (2015), June ter heide et al,(2016) & Maria etal (2016) have also conducted trials and pilot study in recent time.

Neuner, Kurreck, Ruf, Odenwald, Elbert and Schauer,(2009) conducted the first trial of NET in a Western country at a German outpatient clinic. The researchers randomized thirty two (32) asylum seekers with Post Traumatic Stress Disorder and a history of organized violence into NET

or treatment as usual (TAU, included medications in half of the cases and psychotherapy in the other half).Narrative Exposure Therapy patients showed a significantly greater reduction in PTSD symptoms (63%) than TAU patients (19%). Moreover, only two (2) out of sixteen (16) NET patients compared to eight (8) out of sixteen (16) TAU patients showed worsening of symptoms.

Halvorsen and Stenmark (2010) carried out a smaller study from a larger trial by investigating the effectiveness of NET in a sample of refugees that were tortured and those seeking asylum in Norway. The torture survivours were sixteen (16) in number mainly Iraqis and were treated with ten (10) sessions of NET. The findings were that there was a significant reduction in post-traumatic stress disorder PTSD symptoms from pre-treatment to post-treatment. The Post Traumatic Stress Disorder scores also decrease significantly between post treatment and 6-month follow-up. Finally, it was reported that between 45% - 65% of participants used in the study no longer met the criteria for PTSD at follow-up.

Another trial of NET, which included investigators from the original NET developer and research group, was also conducted in Germany (Hensel-Dittmann, Schauer, Ruf, Catani, Odenwald, Elbert & Neuner2011). The study randomized twenty eight (28) clients who had experienced torture and war, most of whom were seeking asylum, into a group that received 10 sessions of NET or 10 sessions of Stress Inoculation Training (SIT). Narrative Exposure Therapy, but not SIT, resulted in significant decreases in PTSD symptoms between baseline

and 6-month and 1-year follow-up. However, NET had no effect on depression and other co-morbid conditions.

Similarly, another trial of NET carried out included investigators from the original NET developer, research group and was conducted in Germany (Adenauer, Catani, Gola, Keil , Ruf, Schauer & Neuner 2011). This trial randomized thirty four (34) refugees into a NET or waitlist control group. Participants who received the twelve (12) sessions of NET demonstrated significant decreases in PTSD and depression at 4-month follow up compared to the control group. Moreover, NET participants evidenced increased parietal and occipital activity in response to frightening pictures. According to Adenauer, Catani, Gola, Keil, Ruf, Schauer and Neuner (2011:127) this suggests increased cortical top-down regulation of attention towards aversive pictures. The increase of attention allocation to potential threat cues might allow treated patients to re-appraise the actual danger of the current situation and, thereby, reducing PTSD symptom.

Another trial of NET was done amongst Iraqi refugees in United States (Hijazi, 2012) who suffer from posttraumatic stress. The effects of narrative exposure therapy were: treatment participation (95.1% completion) and study retention (98.4% provided follow up data) were very high. Significant condition by the time of interaction showed that those receiving brief narrative exposure therapy intervention had shown greater post traumatic growth (d = 0.83) and wellbeing (d = - 0.48) and depression (d = - 0.46) more but only at 2 month; symptoms of controls had also reduced from 2 to 4 months, eliminating condition differences at 4 months.

Another trial of narrative exposure therapy that is ongoing in Finland by Kangaslampi et al, 2015) is studying the effectiveness and mechanism of change with immigrant children repeatedly traumatized by war. The data will be collected from 2014-2017 before results will be presented.

Another trial of NET was conducted by Mauritz et al., (2016) in Netherlands amongst patients with schizophrenia-spectrum disorder, mood disorder, personality disorder and decreased global functioning receiving flexible assertive community treatment and they found that there was a significant reduction in symptoms of patients. Another trial of NET was conducted by Heide et al, 2016) were complex PTSD and phased treatments in refugees. A debate piece, where they found that NET has an effect on the sizes for trauma focused treatment in refugees. In essence, the studies mentioned above have demonstrated the effectiveness of NET in reducing symptoms of PTSD, as well as effectively reducing other symptoms such as physical complains and depression. Also, Narrative Exposure Therapy across a variety of cultural groups, resettlement countries and contexts, and severity of PTSD symptoms has demonstrated effectiveness. Consequently, there is a continued need for developing and adapting effective treatments for refugees and other survivors of organized violence from different cultures who have likely experienced multiple traumas. Thus perhaps these call for reasons to setup research efforts in wide areas of applications of NET across cultures.

Procedure of Narrative Exposure Therapy

NET has been developed for application in regions experiencing crisis, before and after the conflict. Because relatively few professionals are available in these countries to care for a large number of affected people, the treatment is short and pragmatic. It is easy to learn and effective even when provided by trained laypersons or paraprofessionals with no or minimal background in medicine or psychology. It is applicable across cultures and fit into the social and political background of the setting (Ehntholt,2006).

Neuner et. al, (2004) opined that most researchers who are working with refugees or in disaster and war regions are aware that any psychological intervention needs a firm context. Although PTSD may be the most prevailing mental health disorder in most populations affected by war and disaster, a specific treatment module should be integrated into a sustainable and comprehensive psychosocial or mental health program that includes a variety of interventions and a referral structure for medical conditions.

NET can be a key treatment program within such a structure; however, the therapist should be prepared to encounter common conditions, such as ongoing child abuse, substance dependence, grief, and depression. In addition to their training in trauma therapy, therapists should have learned to identify and understand these problems so as to provide assistance or referral to other sources of help.

For NET, the classical form of trauma exposure therapy was adapted to meet the needs of clinically traumatized survivors of war and torture. The different variants of exposure therapy for PTSD usually target the worst traumatic

event, assuming that this approach will lead to the best treatment outcome. Most victims of organized violence, war, and torture have experienced several traumatic events, however, and often it is impossible to identify the worst event before treatment. In addition, the fear networks of different traumatic events overlap, and it can be difficult to sort out the origin of different network items. To overcome this challenge, NET uses the chronicity of testimony therapy. Instead of defining a single event as a target for therapy, the patient constructs a narrative of his or her whole life, from birth to the present, while focusing on the detailed report of the traumatic experiences (Rothe,2008).

In one approach, the therapist records the patient's biography throughout NET. On the final day of treatment, the patient, interpreter, and therapist review the document and sign it. Often the client chooses to advocate for others by sending a copy of the biography to human rights organizations as evidence of trauma.

NET is not used for a single traumatic event; rather, patients are encouraged to construct a narrative of their life up to and including the present. They are encouraged to elaborate on details surrounding traumatic experiences. A consistent narrative is necessary, because memories and emotional processing are not always accurate, particularly when PTSD symptoms are involved. NET maintains a narrative of the traumatic experience(s) and habituates the patient to the emotional responses associated with the memory.

In KIDNET, the therapist may use role-play or visual aids such as a rope, string, rocks, flowers, and drawings to enable the child to reconstruct the traumatic events. For instance, a rope may signify the child's lifespan, whereas

rocks and flowers placed on the rope mark when the traumatic event(s) occurred. Often, children are encouraged to extend the narrative into the future, using flowers used to signify hopes and dreams (Rothe,2008).

KIDNET has been presented in an eight-session format, ideally for children who have already received a structured psychological assessment that includes diagnosis, construction of a comprehensive list of traumatic events, enumeration of their contextual conditions (family background, current threats, and violence), and any exclusion criteria (sometimes substance addiction or psychosis). The first session consists of psychological education of the child and caretaker, informed consent, and development of a lifeline, a visual representation of important events of one's life on a timeline. The second session consists of revisiting the timeline and starting the life narrative at birth. During the third through the seventh sessions, the patient continues to revisit the lifeline, rereads and corrects the narrative from previous sessions, and continues to narrate, focusing on traumatic events. In the eighth session, the lifeline is revisited and symbols are added for future hopes. The whole narration is reviewed, signed, and handed over. Follow-up examination occurs about three months after treatment (Neuner etal, 2008).

2.1.2 Psychological Trauma

DSM-IV-TR (2015) defines trauma as direct personal experience of an event that involves actual or threatened death or serious injury; threat to one's physical integrity, witnessing an event that involves the above experience, learning about unexpected or violent death, serious harm, or threat of death, or injury experienced by a family member or close associate. Memories

associated with trauma are implicit, pre-verbal and cannot be recalled, but can be triggered by stimuli from the in vivo environment. The person's response to aversive details of traumatic event involves intense fear, helplessness or horror. In children it is manifested as disorganized or agitated behaviors.

Trauma can be caused by a wide variety of events, but there are a few common aspects. There is frequently a violation of the person's familiar ideas about the world and their human rights, putting the person in a state of extreme confusion and insecurity. This is seen when institutions depended upon for survival, violate, humiliate, betray, or cause major losses or separations instead of evoking aspects like deserve, special, safe, new and freedom (Fenoglio, Chen & Baram, 2006).

Psychologically traumatic experiences often involve physical trauma that threatens one's survival and sense of security. Typical causes and dangers of psychological trauma include harassment, embarrassment, abandonment, abusive relationships, rejection, co-dependence, physical assault, sexual abuse, partner battery, employment discrimination, police brutality, judicial corruption and misconduct, bullying, paternalism, domestic violence, indoctrination, being the victim of an alcoholic parent, the threat or the witnessing of violence (particularly in childhood), life-threatening medical conditions, and medication-induced trauma. Catastrophic natural disasters such as earthquakes and volcanic eruptions, large scale transportation accidents, house or domestic fire, motor vehicle accident, mass interpersonal violence like war, terrorist attacks or other mass tortures like sex trafficking, being taken as a hostage or kidnapped can also cause psychological trauma. Long-term exposure to situations such as extreme poverty or milder forms of

abuse, such as verbal abuse, exist independently of physical trauma but still generate psychological trauma (Wingo, Aliza , Ressler &Bradley,2014).

Some theories suggest childhood trauma can increase one's risk for mental disorders including posttraumatic stress disorder (PTSD), depression, and substance abuse. Childhood adversity is associated with neuroticism during adulthood. Parts of the brain in a growing child are developing in a sequential and hierarchical order, from least complex to most complex. The brain's neurons are designed to change in response to the constant external signals and stimulation, receiving and storing new information. This allows the brain to continually respond to its surroundings and promote survival. Our five main sensory signals contribute to the developing brain structure and its function. Infants and children begin to create internal representations of their external environment, and in particular, key attachment relationships, shortly after birth. Violent and victimized attachment figures impact infants' and young children's internal representations. The more frequent a specific pattern of brain neurons is activated, the more permanent the internal representation associated with the pattern becomes. This causes sensitization in the brain towards the specific neural network. Because of this sensitization, the neural pattern can be activated by decreasingly less external stimuli. Childhood abuse tends to have the most complications with long-term effects out of all forms of trauma because it occurs during the most sensitive and critical stages of psychological development. It could also lead to violent behavior, possibly as extreme as serial murder. For example, Hickey's Trauma-Control Model suggests that "childhood trauma for serial murderers may serve as a triggering

mechanism resulting in an individual's inability to cope with the stress of certain events (DePrince & Freyd,2002).

Often Psychodynamic aspects of trauma are overlooked even by health professionals: Thus, clinicians may fail to look through a trauma lens and to conceptualize client problems as related possibly to current or past trauma, they may fail to see that trauma victims, young and old, organize much of their lives around repetitive patterns of reliving and warding off traumatic memories, reminders, and affects."

Symptoms

People who go through these types of extremely traumatic experiences might often have certain symptoms and problems afterward. The severity of these symptoms depends on the person, the type of trauma involved, and the emotional support they receive from others. Reactions to and symptoms of trauma can be wide and varied, and differ in severity from person to person. A traumatized individual may experience one or several of them.

After a traumatic experience, a person might re-experience the trauma mentally and physically, hence trauma reminders, also called triggers, can be uncomfortable and even painful. It can damage people’s sense of safety, self, self-efficacy, as well as the ability to regulate emotions and navigate relationships. They may turn to psychoactive substances including alcohol to try to escape or dampen the feelings. These triggers cause flashbacks, which are dissociative experiences where the person feels as though the events are reoccurring. They can range from distracting to complete dissociation or loss of awareness of the current context. Re-experiencing symptoms are a sign that

the body and mind are actively struggling to cope with the traumatic experience (Whitfield &Charles ,2010).

Triggers and cues act as reminders of the trauma, and can cause anxiety and other associated emotions. Often the person can be completely unaware of what these triggers are. In many cases this may lead a person suffering from traumatic disorders to engage in disruptive or self-destructive coping mechanisms, often without being fully aware of the nature or causes of their own actions. Panic attacks are an example of a psychosomatic response to such emotional triggers.

Consequently, intense feelings of anger may frequently surface, sometimes in inappropriate or unexpected situations, as danger may always seem to be present, as much as it is actually present and experienced from past events. Upsetting memories such as images, thoughts, or flashbacks may haunt the person, and nightmares may be frequent. Insomnia may occur as lurking fears and insecurity keep the person vigilant and on the lookout for danger, both day and night. Trauma doesn't only cause changes in one's daily functions but could also lead to morphological changes. Such epigenetic changes can be passed on to the next generation, thus making genetics one of the components of psychological trauma. However, some people are born with or later develop protective factors such as genetics and sex that help lower their risk of psychological trauma (Ramos & Boyle,2001).

The person may not remember what actually happened, while emotions experienced during the trauma may be re-experienced without the person understanding and it can lead to the traumatic events being constantly

experienced as if they were happening in the present, preventing the subject from gaining perspective on the experience. This can produce a pattern of prolonged periods of acute arousal punctuated by periods of physical and mental exhaustion. This can lead to mental health disorders like acute stress and anxiety disorder, traumatic grief, undifferentiated somatoform disorder, conversion disorders, brief psychotic disorder, borderline personality disorder, adjustment disorder, etc.

In time, emotional exhaustion may set in, leading to distraction, and clear thinking may be difficult or impossible. Emotional detachment, as well as dissociation or "numbing out", can frequently occur. Dissociating from the painful emotion includes numbing all emotion, and the person may seem emotionally flat, preoccupied, distant, or cold. Dissociation includes depersonalisation disorder, dissociative amnesia, dissociative fugue, dissociative identity disorder, etc. Exposure to and re-experiencing trauma can cause neurophysiological changes like slowed myelination, abnormalities in synaptic pruning, shrinking of the hippocampus, cognitive and affective impairment. This is significant in brain scan studies done regarding higher order function assessment with children and youth who were in vulnerable environments (Jeronimus, Ormel, Aleman, Penninx & Riese, 2013).

Some traumatized people may feel permanently damaged when trauma symptoms do not go away and they do not believe their situation will improve. This can lead to feelings of despair, transient paranoid ideation, loss of self-esteem, profound emptiness, suicidiality and depression. If important aspects of the person's self and world understanding have been violated, the person may call their own identity into question. Often despite their best efforts,

traumatized parents may have difficulty assisting their child with emotion regulation, attribution of meaning, and containment of post-traumatic fear in the wake of the child's traumatization, leading to adverse consequences for the child. In such instances, it is in the interest of the parent(s) and child for the parent(s) to seek consultation as well as to have their child receive appropriate mental health services.

Assessment

As "trauma" adopted a more widely defined scope, traumatology as a field developed a more interdisciplinary approach. This is in part due to the field's diverse professional representation including: psychologists, medical professionals, and lawyers. As a result, findings in this field are adapted for various applications, from individual psychiatric treatments to sociological large-scale trauma management. However, novel fields require novel methodologies. While the field has adopted a number of diverse methodological approaches, many pose their own limitations in practical application.

The experience and outcomes of psychological trauma can be assessed in a number of ways. Within the context of a clinical interview, the risk for imminent danger to the self or others is important to address but is not the focus of assessment. In most cases, it will not be necessary to involve contacting emergency services (e.g., medical, psychiatric, law enforcement) to ensure the individuals safety; members of the individual's social support network are much more critical.

Understanding and accepting the psychological state an individual is in is paramount. There are many mis-conceptions of what it means for a traumatized individual to be in crisis or 'psychosis'. These are times when an individual is in inordinate amounts of pain and cannot comfort themselves, if treated humanely and respectfully they will not get to a state in which they are a danger. In these situations it is best to provide a supportive, caring environment and communicate to the individual that no matter the circumstance they will be taken seriously and not just as a sick, delusional individual. It is vital for the assessor to understand that what is going on in the traumatized persons head is valid and real. If deemed appropriate, the assessing clinician may proceed by inquiring about both the traumatic event and the outcomes experienced (e.g., posttraumatic symptoms, dissociation, substance abuse, somatic symptoms, psychotic reactions). Such inquiry occurs within the context of established rapport and is completed in an empathic, sensitive, and supportive manner. The clinician may also inquire about possible relational disturbance, such as alertness to interpersonal danger, abandonment issues, and the need for self-protection via interpersonal control. Through discussion of interpersonal relationships, the clinician is better able to assess the individual's ability to enter and sustain a clinical relationship. (Ramos & Boyle,2001).

Jeronimus etal, (2013) said during assessment, individuals may exhibit activation responses in which reminders of the traumatic event trigger sudden feelings (e.g., distress, anxiety, anger), memories, or thoughts relating to the event. Because individuals may not yet be capable of managing this distress, it is necessary to determine how the event can be discussed in such a way that

will not "retraumatize" the individual. It is also important to take note of such responses, as these responses may aid the clinician in determining the intensity and severity of possible posttraumatic stress as well as the ease with which responses are triggered. Further, it is important to note the presence of possible avoidance responses. Avoidance responses may involve the absence of expected activation or emotional reactivity as well as the use of avoidance mechanisms (e.g., substance use, effortful avoidance of cues associated with the event, dissociation).

In addition to monitoring activation and avoidance responses, clinicians carefully observe the individual's strengths or difficulties with affect regulation (i.e., affect tolerance and affect modulation). Such difficulties may be evidenced by mood swings, brief yet intense depressive episodes, or self-mutilation. The information gathered through observation of affect regulation will guide the clinician's decisions regarding the individual's readiness to partake in various therapeutic activities.

Though assessment of psychological trauma may be conducted in an unstructured manner, assessment may also involve the use of a structured interview. Such interviews might include the Clinician-Administered PTSD Scale (CAPS; Blake et al., 1995), Acute Stress Disorder Interview (ASDI; Bryant, Harvey, Dang, & Sackville, 1998), Structured Interview for Disorders of Extreme Stress (SIDES; Pelcovitz et al., 1997), Structured Clinical Interview for DSM-IV Dissociative Disorders- Revised (SCID-D; Steinberg, 1994), and Brief Interview for Posttraumatic Disorders (BIPD; Briere, 1998).

Lastly, assessment of psychological trauma might include the use of self-administered psychological tests. Individuals' scores on such tests are compared to normative data in order to determine how the individual's level of functioning compares to others in a sample representative of the general population. Psychological testing might include the use of generic tests (e.g., MMPI-2, MCMI-III, SCL-90-R) to assess non-trauma-specific symptoms as well as difficulties related to personality. In addition, psychological testing might include the use of trauma-specific tests to assess posttraumatic outcomes. Such tests might include the Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995), Davidson Trauma Scale (DTS: Davidson et al., 1997), Detailed Assessment of Posttraumatic Stress (DAPS; Briere, 2001), Trauma Symptom Inventory (TSI: Briere, 1995), Trauma Symptom Checklist for Children (TSCC; Briere, 1996), Traumatic Life Events Questionnaire (TLEQ: Kubany et al., 2000), and Trauma-related Guilt Inventory (TRGI: Kubany et al., 1996).

Children are assessed through activities and therapeutic relationship, some of the activities are play genogram, sand worlds, coloring feelings, Self and Kinetic family drawing, symbol work, dramatic-puppet play, storytelling, Briere's TSCC, etc.

Treatment

A number of psychotherapy approaches have been designed with the treatment of trauma in mind—EMDR, progressive counting (PC), somatic experiencing, biofeedback, Internal Family Systems Therapy, and sensorimotor psychotherapy.

There is a large body of empirical support for the use of cognitive behavioral therapy (CBT) for the treatment of trauma-related symptoms, including posttraumatic stress disorder. Institute of Medicine guidelines identify cognitive behavioral therapies as the most effective treatments for PTSD. Two of these cognitive behavioral therapies, prolonged exposure and cognitive processing therapy, are being disseminated nationally by the Department of Veterans Affairs for the treatment of PTSD. Recent studies show that a combination of treatments involving dialectical behavior therapy (DBT), often used for borderline personality disorder, and exposure therapy is highly effective in treating psychological trauma. If, however, psychological trauma has caused dissociative disorders or complex PTSD, the trauma model approach (also known as phase-oriented treatment of structural dissociation) has been proven to work better than simple cognitive approach. Studies funded by pharmaceuticals have also shown that medications such as the new anti-depressants are effective when used in combination with other psychological approaches (Jeronimus, Ormel, Aleman, Penninx &Riese,2013).

Trauma therapy allows processing trauma-related memories and allows growth towards more adaptive psychological functioning. It helps to develop positive coping instead of negative coping and allows the individual to integrate upsetting-distressing material (thoughts, feelings and memories) resolve internally. It also aids in growth of personal skills like resilience, ego regulation, and empathy.etc.

Processes involved in trauma therapy are:

- Psycho education: Information dissemination and educating in vulnerabilities and adoptable coping mechanisms.
- Emotional regulation: Identifying, countering discriminating, grounding thoughts and emotions from internal construction to an external representation.
- Cognitive processing: Transforming negative perceptions and beliefs to positive ones about self, others and environment through cognitive reconsideration or re-framing.
- Trauma processing: Systematic desensitization, response activation and counter-conditioning, titrated extinction of emotional response, deconstructing disparity (emotional vs. reality state), resolution of traumatic material (state in which triggers don't produce the harmful distress and able to express relief.)
- Emotional processing: Reconstructing perceptions, beliefs and erroneous expectations like trauma-related fears are auto-activated and habituated in new life contexts, providing crisis cards with coded emotions and appropriate cognition's. This stage is only initiated in pre-termination phase from clinical assessment & judgment of the mental health professional.
- Experiential processing: Visualization of achieved relief state and relaxation methods.

Situational trauma

Trauma can be caused by man-made, technological disasters and natural disasters, including war, abuse, violence, mechanized accidents (car, train, or plane crashes, etc.) or medical emergencies.

Responses to psychological trauma: Response to Psychological trauma can be varied based on the type of trauma, socio-demographic and background factors. There are several behavioral responses common towards stressors including the proactive, reactive, and passive responses. Proactive responses include attempts to address and correct a stressor before it has a noticeable effect on lifestyle. Reactive responses occur after the stress and possible trauma has occurred, and is aimed more at correcting or minimizing the damage of a stressful event. A passive response is often characterized by an emotional numbness or ignorance of a stressor (Ramos & Boyle, 2001).

Those who are able to be proactive can often overcome stressors and are more likely to be able to cope well with unexpected situations. On the other hand, those who are more reactive will often experience more noticeable effects from an unexpected stressor. In the case of those who are passive, victims of a stressful event are more likely to suffer from long-term traumatic effects and often enact no intentional coping actions. These observations may suggest that the level of trauma associated with a victim is related to such independent coping abilities.

There is also a distinction between trauma induced by recent situations and long-term trauma which may have been buried in the unconscious from past situations such as childhood abuse. Trauma is often overcome through

healing; in some cases this can be achieved by recreating or revisiting the origin of the trauma under more psychologically safe circumstances, such as with a therapist.

In psychoanalysis

French neurologist Jean-Martin Charcot argued in the 1890s that psychological trauma was the origin of all instances of the mental illness known as hysteria. Charcot's "traumatic hysteria" often manifested as a paralysis that followed a physical trauma, typically years later after what Charcot described as a period of "incubation". Sigmund Freud, Charcot's student and the father of psychoanalysis, examined the concept of psychological trauma throughout his career. Jean Laplanche has given a general description of Freud's understanding of trauma, which varied significantly over the course of Freud's career: "An event in the subject's life, defined by its intensity, by the subject's incapacity to respond adequately to it and by the upheaval and long-lasting effects that it brings about in the psychical organization".

The French psychoanalyst Jacques Lacan claimed that what he called "The Real" had a traumatic quality external to symbolization. As an object of anxiety, Lacan maintained that The Real is "the essential object which isn't an object any longer, but this something faced with which all words cease and all categories fail, the object of anxiety par excellence".

Stress disorders

Whitfield & Charles, (2010) opined that all psychological traumas originate from stress, a physiological response to an unpleasant stimulus. Long term stress increases the risk of poor mental health and mental disorders, which can be attributed to secretion of glucocorticoids for a long period of time. Such prolonged exposure causes many physiological dysfunctions such as the suppression of the immune system and increase in blood pressure. Not only does it affect the body physiologically, but a morphological change in the hippocampus also takes place. Studies showed that extreme stress early in life can disrupt normal development of hippocampus and impact its functions in adulthood. Studies surely show a correlation between the size of hippocampus and one's susceptibility to stress disorders. In times of war, psychological trauma has been known as shell shock or combat stress reaction. Psychological trauma may cause an acute stress reaction which may lead to posttraumatic stress disorder (PTSD). PTSD emerged as the label for this condition after the Vietnam War in which many veterans returned to their respective countries demoralized, and sometimes, addicted to psychoactive substances. The symptoms of PTSD must persist for at least a month for diagnosis. The main symptoms of PTSD consist of four main categories: Trauma (i.e. intense fear), reliving (i.e. flashbacks), avoidance behavior (i.e. emotional numbing), and hypervigilance (i.e. irritability). Research shows that about 60% of the US population reported as having experienced at least one traumatic symptom in their lives but only a small proportion actually develops PTSD. There is a correlation between the risk of PTSD and whether or not the act was inflicted

deliberately by the offender. Psychological trauma is treated with therapy and, if indicated, psychotropic medications.

The term continuous post-traumatic stress disorder (CTSD) was introduced into the trauma literature by Gill Straker (1987). It was originally used by South African clinicians to describe the effects of exposure to frequent, high levels of violence usually associated with civil conflict and political repression. The term is also applicable to the effects of exposure to contexts in which gang violence and crime are endemic as well as to the effects of ongoing exposure to life threats in high-risk occupations such as police, fire and emergency services.

As one of the processes of treatment, confrontation with their sources of trauma plays a crucial role. While critical incident debriefing people immediately after an event has not been shown to reduce incidence of PTSD, coming alongside people experiencing trauma in a supportive way has become standard practice.

Vicarious

Vicarious trauma affects workers being 'witnesses' to their clients' trauma. It is more likely to occur in situations where trauma related work is the norm rather than the exception. Listening with empathy to the clients generates feeling, and 'seeing oneself' in clients' trauma may compound the risk for developing trauma symptoms. May also result if we are witness to situations that happen in the course of our work (e.g. violence in the workplace, reviewing violent video tapes, etc.). Risk increases with exposure and with the absence of seeking protective factors and pre-preparation of preventive strategies.

2.1.3 Internally Displaced Persons

Kalin (2000) defined internally displaced person (IDP) as someone who is forced to flee his or her home but who remains within his or her country's borders. They are often referred to as refugees, although they do not fall within the legal definitions of a refugee.

At the end of 2014, it was estimated there were 38.2 million IDPs worldwide, the highest level since 1989, the first year for which global statistics on IDPs are available. The countries with the largest IDP populations were Syria (7.6 million), Colombia (6 million), Iraq (3.6 million), the Democratic Republic of the Congo (2.8 million), Sudan (2.2 million), South Sudan (1.6 million), Pakistan (1.4 million), Nigeria (1.2 million) and Somalia (1.1 million).

The United Nations and UNHCR support monitoring and analysis of worldwide IDPs through the Geneva-based Internal Displacement Monitoring Centre.

Whereas 'refugee' has an authoritative definition under the 1951 Refugee Convention, there is no universal legal definition of internally displaced persons (IDP); however, a United Nations report, Guiding Principles on Internal Displacement uses the definition of:

"persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and

who have not crossed an internationally recognized State border (IDMC, 2006).

While the above stresses two important elements of internal displacement (coercion and the domestic/internal movement), it is important to note that, rather than a strict definition, the Guiding Principles offer "a descriptive identification of the category of persons whose needs are the concern of the Guiding Principles". In this way, the document intentionally steers toward flexibility rather than legal precision as the words in particular indicate that the list of reasons for displacement is not exhaustive. However, the general views of countries on the global statistics of internal displacement generally count only IDPs uprooted by conflict and human rights violations. Moreover, a recent study has recommended that the IDP concept should be defined even more narrowly, to be limited to persons displaced by violence." Thus, despite the non-exhaustive reasons of internal displacement, many consider IDPs as those who would be defined as refugees if they were to cross an international border, hence, the term refugees in all but name is often applied to IDPs.

Internally Displaced Persons Populations

It is very difficult to get accurate figures for internally displaced persons because populations aren't constant. IDPs may be returning home while others are fleeing, others may periodically return to IDP camps to take advantage of humanitarian aid. While the case of IDPs in large camps such as those in Darfur, western Sudan, are relatively well-reported, it is very difficult to assess those IDPs who flee to larger towns and cities. It is necessary in many instances to supplement official figures with additional information obtained

from operational humanitarian organizations on the ground. Thus, the 24.5 million figure must be treated as an estimate. Additionally, most official figures only include those displaced by conflict or natural disasters. Development-induced IDPs often are not included in assessments. It has been estimated that between 70 and 80% of all IDPs are women and children (Cohen, 2006).

50% of internally displaced people and refugees were thought to be in urban areas in 2010, many of them in protracted displacement with little likelihood of ever returning home. A 2013 study found that these protracted urban displacements had not been given due weight by international aid and governance as historically they had focused on rural displacement responses. The study argues that this protracted urban displacement needs a fundamental change in the approach to those who are displaced and their host societies. They note that re-framing responses to urban displacement will also involve human rights and development actors and local and national governments. They call for a change in the narrative around the issue is needed to reflect ingenuity and fortitude displayed by displaced populations, the opportunities for self-sufficiency and safety represented by urban areas, and that the displaced can make a contribution to their host societies. An updated country by country breakdown can be found online.

Notable IDP camps

- There are many IDP camps in Nigeria and especially many IDP camps in Borno State.
- Until recently there were many IDP camps in Sri Lanka.

Protection and assistance

The problem of protecting and assisting IDPs is not a new issue. In international law it is the responsibility of the government concerned to provide assistance and protection for the IDPs in their country. However, as many of the displaced are a result of civil conflict and violence or where the authority of the central state is in doubt, there is no local authority willing to provide assistance and protection. Under these circumstances rehabilitation policies on humanitarian grounds should be aimed at reducing inequality of opportunity among these vulnerable groups by integrating them into local social services and allowing them access to jobs, education, and healthcare opportunities; otherwise new conflicts might break out.

Unlike the case of refugees, there is no international humanitarian institution which has the overall responsibility of protecting and assisting the refugees as well as the internally displaced. A number of organizations have stepped into the breach in specific circumstances (Das, Haldar, Sushil, Das Gupta, Ivy, Kundu &Sangeeta ,S2016).

United Nations High Commission for Refugees

The Office of the United Nations High Commissioner for Refugees (UNHCR) was mandated by General Assembly Resolution 428 (V) of 14 December 1950 to "lead and coordinate international action for the worldwide protection of refugees and the resolution of refugee problems....guided by the 1951 United Nations Convention Relating to the Status of Refugees and its 1967 Protocol." The UNHCR has traditionally argued that it does not have a "general competence for IDPs" even though at least since 1972 it had relief and

rehabillatation programs for those displaced within a country. However, in cases where there is a specific request by the UN Secretary General and with the consent of the State concerned it has been willing to respond by assisting IDPs in a given instance. In 2005 it was helping some 5.6 million IDPs (out of over 25 million), but only about 1.1 million in Africa. In 2005, the UNHCR signed an agreement with other humanitarian agencies. "Under this agreement, UNHCR will assume the lead responsibility for protection, emergency shelter and camp management for internally displaced people (IDMC, 2006).

International Committee of the Red Cross

The International Committee of the Red Cross (ICRC) has a mandate of ensuring the application of International Humanitarian Law as it affects civilians in the midst of armed conflict. They have traditionally not distinguished between civilians who are internally displaced and those who remain in their homes. In a 2006 policy statement, the ICRC stated:

The ICRC's overall objective is to alleviate the suffering of people who are caught up in armed conflict and other situations of violence. To that end, the organization strives to provide effective and efficient assistance and protection for such persons, be they displaced or not, while taking into consideration the action of other humanitarian organizations. On the basis of its long experience in different parts of the world, the ICRC has defined an operational approach towards the civilian population as a whole that is designed to meet the most urgent humanitarian needs of both displaced persons and local and host communities (IDMC,2006).

However, its Director of Operations has earlier recognized that for IDPs "deprived of shelter and their habitual sources of food, water, medicine and money, they have different, and often more urgent, material needs."

Collaborative Approach

The previous system set up internationally to address the needs of IDPs was referred to as the collaborative approach as the responsibility for protecting and assisting IDPs was shared among the UN agencies, i.e. UNHCR, Unicef, WFP, UNDP, Office of the High Commissioner for Human Rights, the inter-governmental organization IOM, the ICRC and International NGOs. Coordination is the responsibility of the UN Emergency Relief Coordinator and the Humanitarian Coordinator in the country concerned. They are assisted by the Inter-Agency Displacement Division, which was created in 2004 and is housed in the UN Office for the Coordination of Humanitarian Affairs (OCHA).

Nearly every UN and independent evaluation has found the collaborative approach deficient when it comes to IDPs. To begin with, there is no real focus of responsibility in the field for assisting and protecting...There is also no predictability of action, as the different agencies are free to pick and choose the situations in which they wish to become involved on the basis of their respective mandates, resources, and interests. In every new emergency, no one knows for sure which agency or combination thereof will become involved.

In 2005 there was an attempt to fix the problem by giving sectoral responsibilities to different humanitarian agencies, most notably with the UNHCR taking on the responsibility for protection and the management of

camps and emergency shelters. Although forced migration review acknowledged that the abnegation of responsibility is possible because there is no formal responsibility apportioned to agencies under the collaborative response, and thus no accountability when agencies renege on their promises.

Cluster Approach

The cluster approach designates individual agencies as ‘sector leaders’ to coordinate operations in specific areas to try to plug those newly identified gaps. The cluster approach was conceived amid concerns about coordination and capacity that arose from the weak operational response to the crisis in Darfur in 2004 and 2005, and the critical findings of the Humanitarian Response Review (HRR) had called for strengthening leadership of the sectors, and introduced the concept of "clusters" at different levels (headquarters, regional, country and operational)’.

The cluster approach operates on the global and local levels. At the global level, the approach is meant to build up capacity in eleven key ‘gap’ areas by developing better surge capacity, ensuring consistent access to appropriately trained technical expertise and enhanced material stockpiles, and securing the increased engagement of all relevant humanitarian partners. At the field level, the cluster approach strengthens the coordination and response capacity by mobilizing clusters of humanitarian agencies (UN/Red Cross-Red Crescent/IOs/NGOs) to respond in particular sectors or areas of activity, each cluster having a clearly designated and accountable lead, as agreed by the HC and the Country Team. Designated lead agencies at the global level both participate directly in operations, but also coordinate with and oversee other

organizations within their specific spheres, reporting the results up through a designated chain of command. However, lead agencies are responsible as 'providers of last resort', which represents the commitment of cluster leads to do their utmost to ensure an adequate and appropriate response in their respective areas of responsibility. The cluster approach was part of a package of reforms accepted and subsequently applied in eight chronic humanitarian crises and six sudden-onset emergencies. However, the reform was originally rolled out and evaluated in four countries: DRC, Liberia, Somalia and Uganda. (Kalin,2000).

The clusters were originally concentrated on nine areas:

1. Logistics (WFP)
2. Emergency Telecommunications Cluster (WFP)
3. Camp coordination and management (UNHCR for conflict-generated IDPs and IOM for natural disaster-generated IDPs)
4. Shelter (IFRC for natural disasters; UNHCR for conflict situations)
5. Health (WHO)
6. Nutrition (UNICEF)
7. Water, sanitation, and hygiene promotion (UNICEF)
8. Early recovery (UNDP); and
9. Protection (UNHCR for conflict-generated IDPs, UNHCR, UNICEF, and OHCHR for natural disaster generated IDPs).

International Law

Unlike the case of refugees, there is no international universal treaty which applies specifically to IDPs. Only a regional treaty for African countries has

been established (see Kampala Convention). Some other countries have advocated re-thinking the definitions and protections for refugees to apply to IDPs, but so far no solid actions have come to fruition. Recognizing the gap, the UN Secretary-General, Boutros-Ghali appointed Francis Deng in 1992 as his representative for internally displaced persons. Besides acting as an advocate for IDPs, Deng set out in 1994, at the request of the UN General Assembly to examine and bring together existing international laws which relating to the protection of IDPs. The result of this work was the document, Guiding Principles on Internal Displacement.

The Guiding Principles lay out the responsibilities of states before displacement – that is, to prevent displacement – during and after displacement. They have been endorsed by the UN General Assembly, the African Commission on Human and People's Rights (ACHPR) and by the signatories to the 2006 Pact on Security, Stability and Development in the Great Lakes Region, which include Sudan, DRC and Uganda.

In September 2004 the Secretary-General of the UN showed the continuing concern of his office by appointing Walter Kälin as his Representative on the Human Rights of Internally Displaced Persons. Part of his mandate includes the promoting of the Guiding Principles.

Right of Return

In so-called "post-conflict" situations, there has traditionally been an emphasis in the international community to seek to return to the pre-war status-quo. However, opinions are gradually changing, because violent conflict destroys political, economic and social structures and new structures develop as a

result, quite often irreversibly. Furthermore, returning to the pre-war status-quo may actually be undesirable if pre-war structures led to the conflict in the first place, or prevented its early resolution. IDPs' and refugees' right of return can represent one of the most complex aspects of this issue.

Normally, pressure is applied by the international community and humanitarian organization to ensure displaced people are able to return to their areas of origin and the same property. The UN Principles for Housing and Property Restitution for Refugees and IDPs, otherwise known as the Pinheiro Principles, provides guidance on the management of the technical and legal aspects of housing, land and property (HLP) restitution. Restitution rights are of key importance to IDPs and refugees around the world, and important to try preventing aggressors benefiting from conflict. However, without a clear understanding of each local context, full restitution rights can be unworkable and fail to protect the people it is designed to protect for the following reasons, refugees and IDPs:

- may never have had property (e.g. in Afghanistan);
- cannot access what property they have (Colombia, Guatemala, South Africa and Sudan);
- ownership is unclear as families have expanded or split and division of the land becomes an issue;
- death of owner may leave dependents without clear claim to the land;
- people settled on the land know it is not theirs but have nowhere else to go (as in Colombia, Rwanda and Timor-Leste); and
- have competing claims with others, including the state and its foreign or local business partners (as in Aceh, Angola, Colombia, Liberia and Sudan)

Researchers at the Overseas Development Institute stress the need for humanitarian organization to develop a greater expertise in these issues, using experts who have a knowledge in both humanitarian and land and property issues and so provide better advice to state actors seeking to resolve these issues. The ODI calls on humanitarian agencies to develop an awareness of sustainable reintegration as part of their emphasis on returning IDPs and refugees home. Legal advice needs to be provided to all parties involved even if a framework is created in which to resolve these issues (Kalin,2000).

2.1.4 **Post-Traumatic Stress Disorder (PTSD)**

The DSM-V (American Psychiatric Association, 2013) defines a traumatic event as an event that involves the actual or threatened death or serious injury, or a threat to the physical integrity of self or others. For a diagnosis of post-traumatic stress disorder to occur, eight criteria must be met at some level. They are as follow:

a. The first criterion refers to an individual or group of persons exposure to, serious injury, sexual violence, actual or threatened death in one or more of the following ways:
    i. Directly having to experience the traumatic event or events.
    ii. Having witnessing, in person, the event or events as it occur to others.
    iii. Learning that the traumatic event or events had occurred to a close family member, loved one or close friend. In situations or cases of actual or threatened death of a family member, loved one or friend, the event or events must have been accidental or violent.
    iv. When experiencing repeated or extreme exposure to aversive details of the traumatic event or events (e.g., first responders in collecting human

remains such as: Police officers who are repeatedly exposed to details of child abuse). Note: Criterion A4 as mentioned above does not apply to traumatic exposure through television, movies, pictures, or electronic media unless such exposure is work related.

b. The second criterion specify that there should be the presence of one or more of the following: intrusion symptoms which is associated with the traumatic events and it should beginning after the traumatic events must have occurred:
    i. There should be recurrent, involuntary, and intrusive distressing memories of the traumatic event or events.
    ii. There should be recurrent distressing dreams in which the content and effect of the dream are related to the traumatic event or events.
    iii. There should be dissociative reactions such as flashbacks in which he or she feels or acts as if the traumatic event
    iv. There should be intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event or events.
    v. There should be marked physiological reactions to the individual's internal or external cues that symbolize or resemble an aspect of the traumatic event or events.
c. The third criterion symptoms is when there is persistent avoidance of stimuli associated with the traumatic event or events, beginning after the traumatic event must have occurred, as evidenced by one or both of the following:
    i. When there is avoidance of or efforts to avoid distressing thoughts, memories, or feelings about or closely associated with the traumatic event or events.

ii. When there is avoidance of or efforts to avoid external reminders such as: places, people, conversations, activities, objects and situations that arouse distressing thoughts, memories, or feelings about or closely associated with the traumatic event or events.

d. The fourth criterion symptoms is when there is negative alterations in cognitions and mood associated with the traumatic event or events, beginning or worsening after the traumatic event must have occurred, as evidenced by two or more of the following explained below:

i. The inability of the individual to remember an important aspect of the traumatic event or events usually due to dissociative amnesia and not to other factors such as alcohol, drugs or head injury.

ii. When there are persistent and exaggerated negative beliefs or expectations about others, oneself, or the world (example. “I am bad,” “No one can be trusted,” ‘The world is completely dangerous,” “My whole nervous system is permanently ruined”).

iii. When there are persistent, distorted cognitions about the cause or consequences of the traumatic event or events that lead the individual to blame himself or herself and also others.

iv. When there is persistent negative emotional state such as: anger, guilt, horror, shame, or fear.

v. When there is markedly diminished interest or participation in major activities.

vi. When there are feelings of detachment or estrangement from others.

vii. When there is persistent inability to experience positive emotions. Such as ones inability to experience loving feelings, happiness, or satisfaction).

e. The fifth criterion specifies that there should be marked alterations in arousal and reactivity associated with the traumatic event or events, starting or worsening after the traumatic event must have occurred, as evidenced by two or more of the following listed below:

   i. There should be irritable behaviour and angry outbursts having a little or no provocation and will be typically expressed in verbal or physical form of aggression toward objects or people.

   ii. There will be expression of reckless or self-destructive behaviour.

   iii. The individual will show signs of being hyper vigilance.

   iv. Exaggerated startle response.

   v. There will be problems with concentration.

   vi. There will be sleep disturbance. Such as difficulty staying asleep, falling asleep or restless sleep.

f. The sixth criterion specifies that the duration of the disturbance (Criteria B, C, D, and E) should be above one month.

g. The seventh criterion specifies that the disturbance must cause the following:

   (i) Clinically significant distress

   (ii) Impairment in occupational, social, or other important areas of functioning.

h. The eight criterions specify that the disturbance must not be attributable to the physiological effects of a substance. Such as alcohol, medication, or another medical condition.

   Specify whether:

   With dissociative symptoms: The individual's symptoms meet the criteria for posttraumatic stress disorder, and in addition, in response to the stressor, the

individual experiences persistent or recurrent symptoms of either of the following:

i. Depersonalization: Persistent or recurrent experiences of feeling detached from, and as if one were an outside observer of one's mental processes or body (e.g., feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).

ii. Derealisation: Persistent or recurrent experiences of unreality of surroundings (e.g., the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

Note: To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g., blackouts, behaviour during alcohol intoxication) or another medical condition (e.g., complex partial seizures).

Specify if: With delayed expression: If the full diagnostic criteria are not met until at least 6 months after the event although at the onset expression of some symptoms may be immediate.

Signs and Symptoms

Symptoms of PTSD generally begin within the first 3 months after the inciting traumatic event, but may not begin until years later. In the typical case, the individual with PTSD persistently avoids trauma-related thoughts and emotions, and discussion of the traumatic event, and may even have amnesia of the event. However, the event is commonly relived by the individual through intrusive, recurrent recollections, dissociative episodes of reliving the trauma ("flashbacks"), and nightmares. While it is common to have symptoms after any traumatic event, these must persist to a sufficient degree (i.e., causing

dysfunction in life or clinical levels of distress) for longer than one month after the trauma to be classified as PTSD (clinically significant dysfunction or distress for less than one month after the trauma may be acute stress disorder). Obilom,R.E.,& Thatcher,T.D. (2008).

Associated Medical Conditions

Drug abuse and alcohol abuse commonly co-occur with PTSD. Recovery from posttraumatic stress disorder or other anxiety disorders may be hindered, or the condition worsened, when substance use disorders are comorbid with PTSD. Resolving these problems can bring about improvement in an individual's mental health status and anxiety levels.

Risk Factors

Persons considered at risk include combat military personnel, victims of natural disasters, concentration camp survivors, and victims of violent crime. Persons employed in occupations that expose them to violence (such as soldiers) or disasters (such as emergency service workers) are also at risk. Other occupations that are at higher risk include police officers, firefighters, ambulance personnel, health care professionals, train drivers, divers, journalists, and sailors, in addition to people who work at banks, post offices or in stores. The size of the hippocampus is inversely related to post-traumatic stress disorder and treatment success; the smaller the hippocampus, the higher risk of PTSD (Breslau, Chilcoat, Kessler & Davis,1999).

Trauma

PTSD has been associated with a wide range of traumatic events. The risk of developing PTSD after a traumatic event varies by trauma type and is highest following exposure to sexual violence (11.4%), particularly rape (19.0%). Men are more likely to experience a traumatic event, but women are more likely to experience the kind of high-impact traumatic event that can lead to PTSD, such as interpersonal violence and sexual assault.

Posttraumatic stress reactions have not been studied as well in children and adolescents as adults. 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-wartorn 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, 2005).

Predictor models have consistently found that childhood trauma, chronic adversity, and familial 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. Per 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).

The risk of developing PTSD is increased in individuals who are exposed to physical abuse, physical assault, or kidnapping. Women who experience physical violence are more likely to develop PTSD than men.

Intimate partner violence

An individual that has been exposed to domestic violence is predisposed to the development of PTSD. However, being exposed to a traumatic experience does not automatically indicate that an individual will develop PTSD. There is a strong association between the developments of PTSD in mothers that experienced domestic violence during the perinatal period of their pregnancy.

Those who have experienced sexual assault or rape may develop symptoms of PTSD. PTSD symptoms include re-experiencing the assault, avoiding things associated with the assault, numbness, and increased anxiety and an increased startle response. The likelihood of sustained symptoms of PTSD is higher if the rapist confined or restrained the person, if the person being raped believed the rapist would kill him or her, the person who was raped was very young or very old, and if the rapist was someone he or she knew. The likelihood of sustained severe symptoms is also higher if people around the survivor ignore (or are ignorant of) the rape or blame the rape survivor (Breslau, Chilcoat, Kessler & Davis, 1999).

War-Related Trauma

Military service is a risk factor for 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.

Refugees are also at an increased risk for PTSD due to their exposure to war, hardships, and traumatic events. The rates for PTSD within refugee populations range from 4% to 86%. While the stresses of war impact everyone involved, displaced persons have been shown to be more affected than non-displaced persons (Njau,2005).

Unexpected Death of a Loved One

Sudden, 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).

Life-Threatening Illness

Medical conditions associated with an increased risk of PTSD include cancer, heart attack, and stroke. Intensive-care unit (ICU) hospitalization is also a risk factor for PTSD. Some women experience PTSD from their experiences related to breast cancer and mastectomy.

Pregnancy-Related Trauma

Women who experience miscarriage are at risk of PTSD. Those who experience subsequent miscarriages have an increased risk of PTSD compared to those experiencing only one. PTSD can also occur after childbirth and the risk increases if a woman has experienced trauma prior to the pregnancy. Prevalence of PTSD following normal childbirth (that is, excluding stillbirth or major complications) is estimated to be between 2.8 and 5.6% at 6 weeks postpartum, with rates dropping to 1.5% at 6 months postpartum. Symptoms of PTSD are common following childbirth, with prevalence of 24-30.1% at 6 weeks, dropping to 13.6% at 6 months. Emergency childbirth is also associated with PTSD. Some women experience PTSD from their experiences related to breast cancer and mastectomy (Kalin,2000).

Genetics

There is evidence that susceptibility to PTSD is hereditary. Approximately 30% of the variance in PTSD is caused from genetics alone. For twin pairs exposed to combat in Vietnam, having a monozygotic (identical) twin with PTSD was associated with an increased risk of the co-twin's having PTSD compared to twins that were dizygotic (non-identical twins). There is evidence that those with a genetically smaller hippocampus are more likely to develop PTSD following a traumatic event. Research has also found that PTSD shares many genetic influences common to other psychiatric disorders. Panic and generalized anxiety disorders and PTSD share 60% of the same genetic variance. Alcohol, nicotine, and drug dependence share greater than 40% genetic similarities (Kalin,2000).

Several biological indicators have been identified that are related to later PTSD development. Heightened startle responses and a smaller hippocampal volume have been identified as biomarkers for the risk of developing PTSD. Additionally, one study found that soldiers whose leukocytes had greater numbers of glucocorticoid receptors were more prone to developing PTSD after experiencing trauma (Njau,2005).

2.2 Empirical Review of Literature

2.2.1 History of Post-Traumatic Stress Disorder (PTSD)

Man's exposure to trauma has been a part of his experience since evolution. The most common psychological consequence of trauma is post-traumatic stress disorder (Caffo & Balaise, 2003). Trimble (1985), notes that many legendary heroes and heroines, including Shakespeare's Henry IV, appear to have met some of the diagnostic criteria for PTSD. It was not until the publication of the DSM-III (APA, 1997) that the term posttraumatic stress disorder (PTSD) was officially acknowledged as a unique and valid psychological disorder that is frequently reported among survivors of trauma. Before then various names such as shell shock, battle fatigue, accident neurosis, and post rape syndrome have been used to describe PTSD (Shepaerd, 1996)

During the formulation of DSM-III, a traumatic event was referred to as a disastrous stress or that was outside the range of a normal human experience. The researchers settled with the responsibility of gathering findings to bring about the original diagnosis of PTSD and had grouped natural disasters as earthquakes, hurricanes and volcano eruptions. While man-made disasters were grouped such as war, torture, rape, the Nazi Holocaust, the atomic

bombings of Hiroshima and Nagasaki, factory explosions, airplane crashes, and automobile accidents. They measured traumatic events to be clearly different from the very painful stressors that make up the normal life experiences such as divorce, failure, rejection, serious illness, poverty e.t.c. By this logic, adverse psychological responses to such" every day stressors" would, in DSM-III terms, be characterized as Adjustment Disorders rather than PTSD. This categorization between traumatic and other stressors was based on the hypothesis that, even though most persons have the ability to cope with normal stress, their adaptive capacities are likely to be weighed down when confronted by a traumatic stressor. The DSM-III diagnostic criteria for PTSD have undergone several revisions, with DSM-5 being the most current revised edition. The DSM-5 was published in 2013, prevailing the DSM-IV-TR which was published in 2000.The symptoms of PTSD are mostly the same in DSM-5 as compared to DSM-IV. The key changes include:

i. Post-traumatic stress disorder was moved from the group of anxiety disorder into a new group of "trauma and stress related disorders".

ii. The three (3) clusters of DSM-IV symptoms are now divided into four (4) clusters in DSM-5:- intrusion, avoidance, negative alterations in cognitions, mood and alterations in arousal and reactivity. DSM-IV criteria C avoidance and numbing was separated into two criteria: criteria C (avoidance) and criteria D (negative alterations in cognition and mood). Diagnosis of PTSD now requires in addition, at least one avoidance symptom.

iii. The new symptoms that were added are:

a. Criteria (D): Negative alterations in an individual's cognition and mood (persistent and distorted blame of self or others; and persistent negative emotional state).
b. Criteria (E): Alterations in arousal and reactivity (destructive or reckless behaviour).

iv. Other symptoms were also revised to explain symptom expression.
a. Criterion A_2, which requires fear, helplessness or horror happening right after the traumatic event, was removed in DSM-5.
b. A clinical subtype "with dissociative symptoms" was included. The dissociative subtypes are applicable to individuals who meet the criteria for PTSD and also experience additional derealisation and depersonalization symptoms.
c. A separate diagnostic criterion was included for children aged 6years or younger (preschool subtype).

2.2.2 Traumatic Events and Post-Traumatic Stress Disorder

Post-Traumatic Stress Disorder (PTSD) is a syndrome with the aim of developing after a traumatic event that invoke actual or threatened death or serious injury or threat to the physical integrity of self or others and the individual initially responds with intense fear, helplessness or horror. The person later develops a response to the event characterized by persistent re-experiencing of the event, symptoms of numbness, avoidance and hyper arousal with consequent clinically significant distress or functional impairment (Caffo & Balaise 2003).

Traumatic events that involve interpersonal violence such as rape, combat and torture give rise to PTSD more often than events such as natural disaster, motor vehicle accident which are likely to result in other forms of anxiety

disorders (Gelder, Horison & Cowen, 2006; Yahude, 2002). Posttraumatic Stress Disorder is not the only psychiatric condition that is consequent upon traumatic experience. Other conditions that have been found to co-occur with PTSD include alcohol and other substance use disorders, depression, other anxiety disorders (Kessler, et. al., 1995; Creamer, et. al., 2001; Yehuda, Haligan, Golier, Grossman & Bierer 2004).

2.2.3 Complex Post-Traumatic Stress Disorder

Clinical psychologists over the years have been in debate on the field of trauma especially on the subject matter simple trauma versus complex trauma. For example,(Herman,1992;Schauer,Neuner&Elbert,2011) distinguishes between the classical diagnosis of PTSD that more neatly describes circumscribed traumatic events (for example, an auto-mobile accident) and the more complicated symptom like the picture of individuals who survive repeated prolonged traumatic experiences (for example, parental or domestic abuse, prisoner of war). Hermann argues that individuals who suffered repeated prolonged trauma develop symptoms beyond the more "simple" PTSD symptoms to include deeper character logical changes that frequently affect their identity, affect regulation, system of meaning, and the way they relate to others.

2.2.4 Mechanisms Underlying the Development of PTSD Symptoms

The Fear Network

According to Foa and Kozak (1991) there is an existence of fear network in memory that includes three types of information: information on the feared stimulus; information on verbal, physiological, and behavioural responses to the stimulus; and information on the meaning of the various elements in the

network. Pathological fear, as in the case of PTSD, stems from a pathological fear network that involves faulty associations between various elements in the network and faulty interpretive information, which then gives rise to excessive response elements, such as escape, avoidance, and physiological activation.

What makes the fear network particularly prone to excessive responding is that there are an unusually large number of fear structures encoded during a traumatic event (Schauer, Neuner, & Elbert, 2005). Moreover, these structures span several modalities, such as emotions, physical sensations, visual images, and sound. The large number and variety of fear elements make it more likely that the network will be easily activated, as there are many stimuli in the environment that will be sufficiently similar to one of these elements and can therefore act as triggering cues.

Another unique factor about the fear network is that when fear structures are encoded during a traumatic event, the interconnections between different elements of the structures (e.g., sight and smell) are unusually strong, where exposure to one type of stimulus (e.g., a certain sound) can activate the entire network (Schauer et al, 2005). The activation of the network, in turn, triggers the associated emotional, physiological, and behavioural responses.

Many of the symptoms of PTSD can therefore be explained by the nature of the fear network. For example, the traumatized individual is constantly hyper aroused and vigilant for the numerous internal and external stimuli reminiscent of the trauma that trigger the network and cause a fear response. Once these stimuli are encountered and the fear network activated, intrusive traumatic memories, flash backs, or re-experiencing are also likely to occur. In turn, efforts are made to *avoid* any internal or external stimuli that trigger the network and cause painful re-experiencing. Moreover, because any

physiological arousal has the potential to trigger the fear network and its painful sequel, the traumatized individual may come to avoid any emotions (positive and negative) and essentially "shuts down" and becomes emotionally numb without sensation (Schauer, Neuner & Elbert 2005).

2.2.5 The Nature of Traumatic Memories

It is useful to make a distinction between "cold" and "hot" memories in the context of discussing traumatic memories. Cold memories are part of a system that contextualizes information about one's life (Conway & Pleydell-Pearce, 2000; Schauer,Neuner& Elbert,2011). It includes three levels of information: a first level that describes "life time periods", or discrete phases of someone's life. The second level organizes information about "general events", single or repeated (for example, driving to work place). The third and least easily accessible level organizes contextual information about "specific life events" (for example, attending a funeral event).Specific event memories are connected to sensory and perceptual information or "hot memories" (Schauer, Neuner & Elbert 2005).

In contrast to the contextualized, autobiographical, and verbal nature of "cold" memories, "hot" memories for man inter twined system of sensory, physiological and motor response, as well as cognitive and emotional perceptions. "Hot" memories also seem to be more influenced by input from the limbic system, which regulates emotions, than "cold" memories.

There is increasing evidence that traumatic memories may be encoded differently than memories of ordinary events. Traumatic memories are created during states of intense emotional valence and acute physiological arousal, which makes them more strongly "lay down" and more readily accessed in

subsequent states of high physiological arousal (Vander Kolk, 1995: Schauer,Neuner&Elbert,2011). Moreover, traumatic memories, at least initially, are constituted of sensory and perceptual information (for example, sounds, smells) organized at a non-verbal perceptual level with no linguistic components (Vander Kolk, 1995; Schauer, Neuner&Elbert, 2011). The nonverbal, perceptual nature of traumatic memories makes them more prone to fragmentation and disorganization. For example, (Vander Kolk,1995: Schauer,Neuner&Elbert,2011) explains that "memories of the trauma will be initially experienced as fragments of the sensory components of the event as visual images, auditory, olfactory, kinaesthetic sensations, or an intense waves of feelings" that traumatized clients feel represent elements of the original trauma. He explains that many traumatized patients initially seem unable to put their traumatic experiences into words, or to construct a narrative or a story of what happened to them, but instead "remember " the trauma as somato-sensory flash backs. In fact, the lack of contextual autobiographical information with- in which to embed the traumatic memory and the fragmented nature of the traumatic memory itself may help explain why trauma narratives are often disorganized, fragmented, and incoherent

Furthermore, as discussed in the section about fear networks, the number of fear structures in the network is large, and the inter connections between individual fear elements from various modalities (e.g., visual and auditory) are exceptionally strong. Hence, trauma related memories embedded in the network are easily triggered by a multitude of internal and external cues, where the activation of one or a few elements is enough to trigger the whole network. This activation of the network is thought to cause the subjective experience of intrusive flashbacks, where traumatized patients feel as if they

are reliving the trauma with all its sights, sounds, feelings, and thoughts (Schauer, Neuner & Elbert 2005).

2.2.6 Prevalence of Post-Traumatic Stress Disorder

Jean, Jordi, Giovanni, Ron, Josep-Maria, Koves-Masfety &Jean-Pierre, (2008), conducted a survey among adult's samples of six Western European countries (Germany, Spain, Italy, the Netherlands, France and Belgium).The instrument used for the study was the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI), the Prevalence of 12-month PTSD was 1.1%. The findings was that female gender were risk factor for PTSD because they had economic difficulties, poor social network, and did not feel secure and individuals who had PTSD showed a slight trend towards a lower rate of employment than those without PTSD. However, they excluded homeless individuals and people not sufficiently fluent in the national languages.

In the United States of America, Kessler, Sonnega, Bromet and Nelson (1995) in a large-scale epidemiological study on general population using modified versions of the DSM-III-R PTSD module from the Diagnostic Interview Schedule and of the CIDI, found a life time prevalence of 7.8%. Posttraumatic stress disorder was elevated among women and the previously married. The study also shows that more than one third of people with an index episode of PTSD failed to recover even after many years.

In contrast, Stein, Walker and Hazen (1997) and Andrews, Slade & Peters (1999) reported an estimate for 1-month PTSD prevalence range between1.5–1.8% in the United States general population using DSM–IV criteria. As part of the Australian National Survey of Mental Health and Well-

being, Creamer, Burgess and McFarlane (2001) used a modified version of the CIDI to determine the presence of PTSD, as well as other Axis 1 DSM-IV disorders. The estimated 12month prevalence of PTSD was 1.33%.The prevalence was elevated among the never married and previously married respondents, and was lower among those aged over 55years. For both men and women, rape and sexual molestations were the traumatic events associated with PTSD.

A number of studies have examined the prevalence of PTSD in the general population of the Middle East. In the over all, the prevalence of PTSD ranges widely from less than one percent to more than a third of the sample. For example, Mohammadi, David, Noorbala, Malekafzali, Naghavi & Pouretemad (2005) conducted a nationwide survey of 25,180 adult residents in Iranian general population and found a life time PTSD prevalence of less than 1%. On the other hand, Karam, Mneimneh, Dimassi, Fayyad, Karam and Nasser (2008) found a 3.4% lifetime prevalence rate of PTSD in a nationally representative sample of adult Lebanese civilians. Still in the Middle East, Bleich, Gelkopf and Solomon (2003) in Israel reported that 9.4% of the adults in their sample have current PTSD diagnosis. The Middle East is remarkably heterogeneous, encompassing a large variety of cultures, political systems, ethnicities, and religious beliefs. These factors were major limitations for the cross-cultural application of the instruments used and the generalization of the findings.

In sub-Saharan Africa the reverse is the case to the findings mentioned above such as a Nigerian Survey of Mental Health Wellbeing (NSMHW) conducted by Gureje, Lasebikan, Kola & Makanjuola (2006) in eight states of the South-West and North-Central regions of Nigeria, yielded virtually absent 12-

month and life time prevalence of PTSD. Furthermore, Beiser, Wiwa & 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.

In the same manner, Oluwaseun, Eme, Olusimbo and Oluwafemi (2012) in a comparative study of mental health and quality of life in long term refugees and host population in Oru-Ijebu, Southwest Nigeria, reported that 13.7% of the host population had symptoms of PTSD using Mini-International Neuropsychiatric Interview (MINI) developed by Sheehan, Lecruibier and Harnett-Sheehan (1998).

PTSD prevalence has also been examined in populations affected by conflict and other trauma victims across the world. For instance, Eytan , Gex-Fabry, Toscani, Deroo and Bovier (2004) conducted a survey among Kosovo refugees in the United Kingdom (UK) and found a 23.5% prevalence of current PTSD in their sample using psychiatric interview, while AiAL, Peterson and Ubelhor (2002) and Turner, Bowie, Dunn, Shapo and Yule (2003) in two separate studies on the same population (Kosovo refugees in the UK), found a 60.5% and 65% prevalence of current PTSD respectively using self-report measures. Turner, Bowie, Dunn, Shapo and Yule (2003) however argued that self-report measures also over-estimate the prevalence of PTSD. The view of over estimation of prevalence rate was supported by Dahl, Mutapcic and Schei (1998), who also used a self-report measure and found a prevalence rate of 71% for current PTSD in their sample of displaced Bosnian women in a war zone.

Orla, Muldoon and Ciara (2007) conducted a cross sectional post conflict survey in Northern Ireland six-years after a period of protracted political conflict in that country. They found an approximately10% prevalence of current PTSD in their sample, using Post-Traumatic Stress Disorder Checklist developed by. The study also found that those with PTSD were most likely to report multiple direct and indirect trauma experiences, with direct experience appearing to have a more powerful impact on PTSD. In addition, respondents of lower socio-economic status were disproportionately affected by PTSD.

Michultka, Blanchard and Kalous (1998) had used a diagnostic interview method in investigating how civilians will responed to war experiences among Central American refugees, the found that 68% of their sample (N=50) had current PTSD, but acknowledged the fact that their study was limited by their sample size.

A cross-sectional survey among adult population, 2–3years after the September11, 2001 terrorist attacks on the World Trade Centre, found a 12.1% prevalence of PTSD by using the PTSD Checklist (Laura, Megan, Lorna & Thorpe 2008). Marshal, Shell, Eliot and Berthold (2005) in a study among Cambodian refugees resettled in Australia have shown that twenty years after, the refugees continued to suffer from PTSD and other mental disorders related to trauma.

One of the early studies in Asia that looked into the psychological effects of conflict on civilian population in Sri Lanka found a 27% prevalence of current PTSD (Steel, Silove & Bird, 1999). In this study, the breakdown of the Tamil society had led to women taking on more responsibilities, which in turn made them more susceptible to stress and were more at risk of developing PTSD.

Similarly, a cross sectional survey on Afghan national sample, a nation that has endured a long standing conflict and terrorism showed that 42% of the sample qualified for a diagnosis of PTSD (Marshal, Shell, Eliot and Berthold 2005).

The results of studies conducted in countries with in the Middle East region have reported a similarly high prevalence of PTSD among civilian survivours of war compared to the rates found in general population. Aziz, Günay, Meliksah, Mustafa and Mehmet (2008) examined the prevalence of PTSD and related factors among randomly selected 708 adults, 18years and above living in post conflict areas of Diyarbaka city centre, Turkey. They found a 15.1% prevalence of PTSD using Clinicians Administered Post-Traumatic Stress Scale (Blake, Weathers, Nagy, Kaploupek, Klaumirizer, Charney, Keane & Buckley, 2000) despite more than approximately ten years of traumatic experience. In the same study, they found that being unemployed or working as an unqualified employee and ethnic difference were found to predict PTSD. However, they noted that their finding might not be a good reflection of PTSD prevalence among people living in post conflict rural areas.

In a study conducted among residents living in sub-urban areas of Jerusalem, Shalev, Tuval, Frenkiel, Fishman, Hadar and Eth (2006) compared participants that were directly and frequently exposed to acts of terrorism and those indirectly exposed and found that 26.95% of residents directly exposed and 21.35% of those indirectly exposed, met DSM-1V symptoms criteria for PTSD after ten months of armed conflict. The study also revealed that increased levels of exposure to trauma and disruption of daily living contributed to PTSD in the directly exposed group than those indirectly exposed. A similar study designed to examine PTSD and depression amongst

a sample of Lebanese civilians who were already exposed to a traumatic church explosion one year after the event revealed that 39% of the victims met PTSD diagnostic criteria, 51% of them were depressed using the Clinician Administered PTSD Scale Version I and Beck Depression Inventory. The study also revealed that being a female and those with financial problems were more at risk of developing PTSD with and without depression (Farhood & Noureddine 2003).

The results of few studies conducted among post-conflict populations in Africa demonstrated a variously high prevalence of post-traumatic stress disorder in the range of 23.2% - 80%, within credibly high rates among internally displaced populations. In support of this, Galea, Rockers, Saydee, Macauley and Kruk (2010) in a recent study conducted in Liberia found a 48.3% prevalence of PTSD almost two decades after the war in that country has ended, with a high rate of unemployment as a strong correlate of PTSD.

A cross-sectional multi-staged random cluster survey was conducted among internally displaced persons who are peculiar population faced with additional stressors like insecurity, social problems, chronic over- crowding, and high rates of morbidity and mortality. The participants size was 1,210 adults in northern Uganda and they found that over half (54%) of the respondents had met symptom criteria for PTSD using the original version of Harvard Trauma Questionnaire. Their result also indicated that gender, marital status, sexual abuse and experiencing higher rates of trauma exposure were strongly linked with PTSD (Bayard, Kaducu, John, Thomas & Eybert, 2008).

Njau (2005) in a study among internally displaced Kenyans following ethnic clashes in some parts of the country, found a prevalence rate of 80.2% of post-traumatic stress disorder (PTSD) amongst heads of household. Pham, Harvey

&Timothy (2004) in a study to assess the level of trauma exposure and the prevalence of PTSD symptoms and their predictors among Rwandans using PTSD Checklist-Civilian Version, evaluated 2091 trauma exposed individuals following the Rwanda genocide in 1994, 24.8% met the diagnostic criteria for PTSD. In the study, there were high number of traumatic events and also high prevalence of those meeting the PTSD investigative criteria with some geographic differences. This reflects the level and type of exposure in the four communities studied and also suggesting that culture may influence the experience or reporting of traumatic events. De Jong, Mulhern and VanderKam (2000) in a community sample in Sierra Leone, reported that 99% of them were approximated to be suffering from war-related PTSD based on the Impact of Event Scale instrument used in the study (Mardi, Nancy & William, 1979). Also, upon closer examination, most Impact Event Scale items relate only obliquely to PTSD diagnostic criteria as specified in the DSM-IV-R, signifying that such a high estimated prevalence should be viewed with scepticism.

Beiser, Wiwa and Adebajo (2010) did a comparative study of PTSD among the people of Niger Delta which was a scene of long-standing violence and human right abuse that reached its apogee in 1995. In the study, they used PTSD module of the WHO-CIDI Diagnostic Interview Schedule and focused on two villages, one that was heavily exposed to the conflict and the other relatively spared. They found a six-month period prevalence of 60% among adults in the conflict affected area and 14.5% among adults in the group relatively spared of the conflict. The sample size used in the study was however modest. Another Nigerian study carried out on seventy six Nigerian Biafran war survivors comprising eighteen disabled combatant Biafran war

veterans, thirty Biafran war combatant survivors and twenty eight non-combatant Biafran war survivors. Using the Los Angles Symptom checklist (King, King, Daniel, Leskin, Gregory & Foy, 1995), 20.6% of the disabled and18.2% of the not-disable combatants had PTSD compared to a low rate of 6.2% found among the non-combatants, four decades after the war (Ezeokana, Chukwukelu, Nnedum & Omonijo 2011).

Obilom and Thacher (2008) studied 290 respondents for PTSD in Jos, Nigeria, following the September 2001 ethno-religious crisis, using a multi stage cluster sampling. They found that 41% met all three criteria for PTSD 89.7%; met re-experiencing criteria; and 49.1% met avoidance criteria while 80.4% met arousal criteria. The researchers were interested in the symptom distribution, supporting the demand for sub threshold PTSD diagnosis for those not meeting the full diagnostic criteria but having a lot of psychological distresses following traumatic exposure. Posttraumatic stress disorder was diagnosed using DSM-III-R, rather than DSM-IV criteria.

2.2.7 Risk Factors for Post-Traumatic Stress Disorder

Researchers such as Obilom & Thatcher, 2008; Yehude, 2002; Kenneth & Andrew, 2010; Moisander, Edston & Sequel, 2003; Wenzel, Griengel, Stompe, Stompe, Mirzaei &Kieffer 2000 over time have reported various risk factors for PTSD conducted. The risk factors are grouped into three as listed below;

1. Group I : factors such as demographic and trauma that predicted Post Traumatic Stress Disorder in some populations but not in others;
2. Group II: factors such as demographic, previous trauma experience, and general childhood harsh conditions that predicted Post Traumatic Stress

Disorder more often but to a varying extent according to the populations studied and the methods used in the research;

3. Group III: factors such as history of psychiatric experiences, reported childhood violence and family psychiatric history that had more consistent predictive effects.

Although individually the effect size of all the risk factors was modest, the factors functioning during or after the trauma, such as lack of social support, trauma severity and additional life stress had rather stronger effects than pre trauma factors. Some of the risk factors are discussed below:

Trauma

The necessary cause of PTSD is an exceptionally stressful event, with the highest rate of PTSD amongst those who experienced the greatest exposure to the stressful events (Yehude, 2002; Keneth & Andrew, 2010). For instance, Obilom and Thatcher (2008) in the study they conducted among survivors of the ethno-religious conflict in Jos, Plateau State showed that the type of trauma significantly associated with PTSD was being a victim of the violence or witnessing a person being attack. Moreover, Moisander and Ediston (2003) found PTSD prevalence as high as 69-92% among refugee victims of torture from six different countries. Wenzel, Griengl, Stompe, Mirzaei and Kieffer (2000) also reported PTSD prevalence of 92% among torture victims after three years.

Gender is well researched as an important risk factor for PTSD. According to a study by Breslau, Chilcoat, Kessler, Peterson and Lucia (1999) men are reported to having experienced more traumatic events in their lives, and less sexual violence. While women are more prone to experiences of sexual violence, and also women have a higher prevalence of PTSD than men, with

disorder's course in women tending to be more chronic. Although men tend to experience more traumatic events, women's subjective traumatic experience is usually more threatening than that of men. Therefore, trauma exposure differences amongst gender soften once subjectiveness (Breslau, Chilcoat, Kessler, Peterson &Lucia 1999). However, in settings that are continually affected by violence or war, the female's risk for PTSD catches up with male's risk. This finding is supported by Wolfe, Erickson, Sharkansky, King and King (1999) who found that Post Traumatic Stress Disorder rates following the Gulf War 1990 to 1991 combat experience were even higher in men than with women. In addition, several epidemiological studies have reported higher rates of affective and anxiety disorder in women than in men (Kessler, Sonnega, Bromet & Nelson, 1995; Mohammadi, David, Noorbala, Malekafzali, Naghavi & Pouretemad 2005; Beiser, Wiwa & Adebajo 2010) and prior psychiatric history is an important risk factor in the development of Post-Traumatic Stress Disorder following traumatic exposure. Breslau, Davis, Peterson and Andreski, (1991) have also noted that pre-existing anxiety or depressive disorders may be an important factor in understanding observed sex differences in Post-Traumatic Stress Disorder.

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. As with gender studies, 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).

Finally Gelkopf, Solomon, Berger and Bleich (2008) examined the prevalence of PTSD among Arabs and Jews at 44 months after the start of the second Intifada war; they found that significantly more Arabs (16.9%) than Jews (7.4%) were diagnosed with the disorder because of the increase number of bomb. Similarly, the nationwide study after the Rwandan genocide reported that older age, being unmarried and ethnic difference were found to predict PTSD, with those who described themselves as Tutsi more likely to meet symptom criteria for PTSD than those self-identified as Hutu (Pham, Harvey & Timothy, 2004).Kessler, Sonnega, Bromet, Nelson, (1995) had earlier documented that previously married (separated, divorced, or widowed) women were at greater risk of developing PTSD than those who were currently married. Socio-economic disadvantage, and in particular, financial difficulties were found to predict PTSD among trauma survivors in Northern Ireland (Orla & Downes 2007), Liberia (Galea, Saydee, Macauley, Varpilah & Kruk 2010) and South-Sudan (Farhood & Noureddine, 2003).

The study in the Niger-Delta also reported that not feeling safe of living in the community was significantly associated with the risk of developing PTSD (Beiser, Wiwa &Adebajo 2010). Moreover Yehuda, Haligan, Golier, Grossman and Bierer (2004) reported that learning about a traumatic event challenges the person's sense of safety and renders the individual powerless and more vulnerable to developing PTSD.

2.2.8 Psychological Treatments of Post-Traumatic Stress Disorder

Behavioural Interventions

Behavioural treatments aim at inhibiting the fear response through habituation and eventual extinction (Foa & Kozack, 1991). This process takes place through exposure to trauma related stimuli, which activates the fear network and associated memories. However, exposure to trauma related stimuli in a safe environment also allows for the integration of corrective information that is incompatible with the original faulty associations between various internal and external cues and the fear response. By continually exposing the person to fearful stimuli, along with incompatible information, the maladaptive associations between the stimulus (fearful memories) and response (PTSD symptoms) are gradually weakened, and the fear and emotional arousal habituate, thus reducing symptoms.

Exposure to fearful stimuli can include external trauma related cues, or internal ones such as thinking or talking about the trauma. Exposure can be gradual such as in systematic desensitization or more intense as in flooding, where the person is exposed to their most feared stimuli at once. Exposure can also include exposing the person to feared situation in real life (for example, scene of a crime or rape) or imagined, where the person imagines being in the feared situation or is exposed to fearful memories.

Cognitive Interventions

Attributions are people's way of making meaning of their experiences and the world around them and understanding the reasons behind event that happen to them. However, when attributions and other beliefs and assumptions are distorted, they can result in a dysfunctional thought system that contributes to depression, anxiety, and PTSD symptoms (Foa, Rothbaum, Riggs, & Murdock, 1991**;** Foa, Steketee, & Rothbaum, 1989).Cognitive therapy hence focuses on helping people identify their dysfunctional beliefs about themselves and the world, as well as their appraisal and attributions of the traumatic event. Once these distorted or maladaptive beliefs are identified, they are gradually modified and replaced with more reality based interpretations and attributions of why the traumatic event happened. Therapy also helps traumatized individuals not to generalize a distorted or negative set of appraisals about the trauma to their whole life, and assists them in rebuilding their sense of safety and self-worth (Shalev, Bonne & Eth, 1996).

Trauma focused cognitive behavioural therapies are often "packages" that combine several elements. Many include prolonged exposure to mental images, memories and other stimuli associated with the trauma combined with some type of skills trainings. Some of these skills include relaxation and breathing techniques, anxiety management techniques, and stress inoculation training. Trauma focused CBT also focuses on identifying and modifying distorted and maladaptive beliefs about the self or the traumatic event (Rothbaum & Foa, 1996).

Psychodynamic Interventions

The main goal of psychodynamic treatment is to help the traumatized individual understand the traumatic event and integrate it through "therapeutic

re-experiencing in a safe environment" (Horowitz, 1974). One way to do this is to help people develop insight about the meaning of the traumatic event for them and understand the conscious and unconscious meanings and functions of the trauma related symptoms. By gaining insight about the meaning of their symptoms, they can build mastery of the trauma and their inner experiences and restore functioning .Also, in psychodynamic treatment, the therapist awards particular attention to how the traumatic event is super imposed on someone's personal history and pre-existing coping and defensive strategies. Another main task of therapy is for the therapist to build a strong alliance with the client within which issues of transference and counter transference can be explored.

2.2.9 Efficacy of Psychological Treatments for PTSD

Several reviews and meta-analyses exploring the effectiveness of various psychological treatments for Post-Traumatic Stress Disorder have been conducted in last two decades. Shalev, Bonne and Eth (1996) reviewed biological and psychological approaches including behavioural, cognitive behavioural, psychodynamic, as well as others such as group and hypnotherapy. Most studies of behavioural therapies, including imagined or live flooding and systematic desensitization, were effective in reducing symptoms. However, in a few studies (all of which were conducted with Vietnam or Israeli and Lebanon war veterans) treatment caused an increase in symptoms (Hyer, Woods, Bruno, Boudewyns, 1989; Pitman, Altman, Greenwald, Longpre, Macklin, Poire, & Steketee, 1991; Solomon, Shalev, Spiro, Dolev, Bleich, Waysman, & Cooper, 1992). The handful of cognitive therapy studies reviewed resulted in decreases in PTSD symptoms that were maintained at several months follow-ups. Their view also included a

handful of psycho dynamic therapy studies, many of which were also found to be effective in reducing symptoms. In addition, their view found that symptoms of depression, anxiety, and detachment generally improved more than intrusiveness and avoidance.

Sherman (1998) conducted a meta-analysis of 17 studies of psychological interventions for PTSD with a comparison group. With the exception of one psychodynamic study and a few lesser known treatments, most of the treatments were behavioural or cognitive behavioural, and all but two had exposure components .The average effect sizes in the study were d = 0.54, with similar effect sizes for periods of follow- up ranging between three (3) months and two (2 years). The treatments had effect sizes between 0.55 and 0.79 for the three clusters of Post-Traumatic Stress Disorder symptoms, as well as for depression and anxiety, suggesting moderate clinical improvements across various symptoms.

A more recent meta-analysis by Bradley, Greene, Russ, Dutra and Westen (2005) reviewed 26 studies between 1980 and 2003. Nineteen of the studies involved some form of behaviour/exposure therapy, cognitive behaviour therapy, EMDR, or a combination of the above. The overall effect sizes ranged between 0.83 and 1.43, depending on the design and type of control used, and 67% of clients who completed psychological intervention no longer met criteria for Post-Traumatic Stress Disorder. There was no effect sizes reported for therapy modalities not in the cognitive behavioural family.

The above reviews suggest: exposure-based therapies and trauma focused cognitive behavioural therapies have the strongest support for efficacy in reducing PTSD and other symptoms.

McFarlane (1994) notes that all clinical interventions seek to help the client reduce cognitive, behavioural, and affective avoidance of internal and external cues associated with the trauma. All clinical treatments seek to help the client develop a more realistic appraisal of the traumatic event and (focus on the here and now) their current safety. All treatments seek to help people make meaning of their traumatic experience, integrate it into their life and gain a sense of mastery over the distressing symptoms. In other words, all therapies to an extent embody Horowitz's (1974) conceptualization of trauma therapy as helping the person work through the trauma through gradual re-exposure and re-experiencing of it in a safe therapeutic environment. Hence, although exposure based treatments may be the most represented in reviews of the literature on controlled studies due to their sheer number, one must not ignore that other treatment modalities may have similar active therapeutic mechanisms.

There are also several limitations to the current literature. First, broad conclusions about the particular effectiveness of exposure based therapies to the potential exclusion of other therapies must be tempered with recognizing that most other modalities are heavily under-represented in reviews of the literature (possibly because they are less frequently examined in the context of randomized controlled trials). Another limitation of the literature is that few of the studies have been conducted on clients who have experienced severe and multiple traumatic events, whether in the context of war or other organized violence. When such studies have been conducted, treatment of combat related PTSD demonstrated the lowest effect sizes compared to other populations (Bradley, Greene, Russ, Dutra, & Westen (2005) and in

some cases worsening and deterioration of symptoms. It is unclear why this is the case, but it is possible that this population is more difficult to treat and is set apart by the multiplicity and severity of traumatic events experienced in a war context (Silove, 1999).

One explanation could be that interventions often limited sensitization to a single traumatic event. In fact, a study investigated physiological response to mental imagery of the trauma before and after exposure and found that the desensitization to one set of imagery from the event does not generalize to other traumatic images or incidents provoked by the same event (Shalev, Orr & Pitman, 1992).These findings suggest that usefulness of exposure therapy in treating prolonged and cumulative trauma must be further re-examined. Also, despite the overall efficacy of exposure therapy in reducing symptoms, conclusions from the several studies with veterans that indicated deterioration in functioning must be carefully considered.

Finally, the review of the literature above highlights how very few of these studies were conducted with victims of organized violence in general and internally displaced persons in particular, which is a notable shortcoming, because internally displaced persons as a population are highly vulnerable to trauma and PTSD and have unique needs; even the crowded conditions in which government lump internally displaced persons can keep the traumatic memories fresh via worrying, disturbance, in conduciveness.

Researches about trauma and intervention with internally displaced persons are still growing, but have especially grown over the past 10 years. 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.

An earlier review by Nicholl and Thompson (2004) found only 10 studies specifically exploring the topic, which included some medical studies, a few controlled randomized trials, and mostly qualitative and anecdotal sources. Also, these studies often had vague descriptions of treatment modalities. For example, one uncontrolled study (Brune, Hassen, Krauz, Yagdiran, Bustos & Eisenman, 2002) found that a therapy consisting of various medical and psychosocial interventions helped reduced stress in a sample of refugees. Another uncontrolled study (Weine, DuzburKulnovic, Pavkovic, & Gibbons, 1998) found that Bosnian survivors of state sponsored violence who engaged in testimony therapy (involves detailed narration and documentation of life story) demonstrated improvement on measures of PTSD, depression, and global functioning. Finally, Paunovic and Ost (2001) randomized refugees into either an exposure only group or to a cognitive behaviour therapy group that included both exposure and cognitive restructuring. Both groups demonstrated equivalent improvement on measurement of quality of life, anxiety, Post Traumatic Stress Disorder symptoms and depression.

Another review by Palic and Elkilt (2011) used broader criteria to include any studies of psychological interventions that at least used a pre-post design. Twenty five studies were reviewed, most of which included some form of cognitive behavioural, trauma-focused cognitive behavioural, or exposure therapies, as well as Narrative Exposure Therapy. Other types of interventions included were multi-disciplinary

interventions which often incorporated some form of psychotherapy and psychoactive medication, music therapy, psychodynamic psychotherapy, and thought field therapy (acupuncture, chiropractic's and psychotherapy).The authors argue that CBT (including NET) demonstrate large effect sizes, notably on PTSD as an outcome. However, because it is proposed that reactions to trauma may include symptoms that expand beyond the diagnostic symptoms of PTSD such as depression, more research is needed to investigate the effectiveness of these interventions in more complex presentations. The authors also in their view conclude that non CBT studies were less methodologically rigorous and fewer in number, which precludes firm conclusions about their effectiveness.

Another review by Nickerson, Bryant, Silove, and Steel (2011) proposes that psychological interventions for refugees can often be divided into trauma focused and multimodal interventions. Their view includes 19 studies for both types of interventions. Most of the trauma focused ones were included in the above reviews. Multi modal interventions include general resettlement assistance, advocacy, acculturation assistance; referrals to language and medical services, and psychological interventions that often are not trauma focused, but may include supportive psychotherapies and present focused interventions. The authors argue that despite the complicated situation of refugees, which often includes numerous psycho-social stressors, the few psychological intervention studies conducted and reviewed have not demonstrated a high level of reductions in PTSD and other mental health symptoms. However, the authors point out that no randomized studies was

conducted in the interventions, making it difficult to ascertain the reasons for the lack of effectiveness of such intervention.

2.3 Theoretical Framework

2.3.1 Psychological Theories of Post-Traumatic Stress Disorder (PTSD)

Behavioural Theories

The behavioural model conceptualizes Post Traumatic Stress Disorder (PTSD) in terms of an association through classical conditioning between the precipitating trauma and the subsequent fear symptoms. According to this theory, the original trauma (unconditioned stimulus) precipitates a natural fear and arousal reaction (unconditioned response). Eventually, various internal and external cues associated with the original trauma (conditioned stimulus) will come to precipitate the same fear response that occurred during the original trauma (conditioned response).

The resistance of PTSD symptoms to habituation or spontaneous extinction has been explained in the light of Mowrer's two factor model (Boudewyns, 1996; Mowrer, 1960). According to this model, "simple" or classic conditioning explains why there is an aversive emotional arousal experience to cues associated with the trauma (for example, sounds of gunshots). Operant conditioning (specifically, negative reinforcement) explains the avoidance of these cues. Traumatized individuals learn that they can further minimize their distress by avoiding a wider array of internal and external cues associated with the trauma (for example, memory of the event).The reward of minimizing distress through avoidance serves to maintain the behaviour, prevent it from extinction, and expand the avoidance behaviours to more cues.

Alternatively, PTSD symptoms can also be conceptualized as a disruption in neuro-biological processes that is behaviourally reflected in impaired stimulus discrimination (VanderKolk, 1996). According to this model, the trauma impairs person's capacity to focus on appropriate fear stimuli and ignore other innocuous stimuli, as well as an individual ability to inhibit responses and actions when stimulated (loss of impulse control). Because they are constantly "on guard for the return of the trauma", traumatized individuals narrow their concentration onto sources of possible threat, and then have trouble attending to other neutral or pleasant stimuli (VanderKolk, VanDerHart, & Marmar, 1996: Hijazi, 2012).

The Cognitive Theories

Cognitive psychology postulate that our core view point about ourselves and the world are organized into knowledge structures called schema, which allow us to make sense of our emotional experiences and prevent us from being overwhelmed (Epstein,1991;Foa,Rothbaum, & Steketee, 1993). By helping us integrate new information into existing structures, our schema balance between allowing us to be flexible to changing realities while safe guarding our core perspectives and values (Shalev, Bonne, & Eth,1996). Yet, information from a traumatic event is often so out of the ordinary, shocking and terrifying that it is difficult to accommodate and assimilate it into pre-existing schema.

Individuals often experience intense distress and negative emotions such as shock, loss, and anger when their core schemas about themselves and the world are challenged by discrepant information (Epstein, 1990; Wilson, 1989; Hijazi, 2012). Moreover, people's inability to incorporate trauma information into their pre-existing schema often means that they generalize information

from their traumatic incident into a new schema that holds maladaptive beliefs, such as appraisal of the world as a dangerous place, or of the self as helpless and vulnerable (Shalev, Orr & Pitman, 1996). Furthermore, intrusive thoughts and memories may occur due to "incomplete assimilation of trauma-related information into pre-existing schemata or from incomplete accommodating of the pre-existing schemata to the new information" (Lepore, 1997). Successful integration of this information into a more coherent whole thus requires exposure to traumatic stimuli such as memories. However, traumatized individuals' reluctance to think and talk about the trauma due to its painful nature perpetuates the cycle of distress, as it may impede assimilation, prolong intrusions, or even prompt new intrusions (Gold & Wegner, 1995).

Psychodynamic Theories

Psychodynamic models of trauma can be highly varied and complicated. However, at their base, most of them conceptualize PTSD symptoms as not having worked through the trauma sufficiently or having been unable to integrate the traumatic experience into the self (Horowitz, 1974). The traumatic experience and the difficulty in working through it create a "traumatized self", characterized by collapse of structure and altered rules of mental functioning that impair self-healing (Benyakar,Kutz,Dasberg,&Stern,1989;Shalev, Bonne & Eth 1996).The dysfunctional system is then reflected in the person's alternation between phases of denial and intrusive symptoms. Denial, emotional numbing and avoidance represent defensive over control, which when overwhelmed results in intrusive thoughts, flashbacks or nightmares, or under control (Horowitz, 1974**).**

Narrative Exposure Therapy

Generally traditional exposure focuses on the worst traumatic event the person has experienced; however, victims of organized violence and most internally displaced persons have likely experienced multiple traumas and it may not be possible to identify a single most horrible event. Hence, instead of asking the person to identify a single event, individuals construct an entire chronological narration of their life, from birth to present, in which they contextualize details of their traumatic experiences.

As patients narrate their life story, traumatic memories and the associated fear networks are triggered. A main focus of NET is to aid the patient in constructing new declarative autobiographical memories about the trauma (cold memories) as the hot memories are activated. During this process, the patient works through the physical sensations, thoughts and emotions (hot memories) embedded in the network and labels and places the fragments until they are able to create an autobiographical representation of the traumatic event (cold memory) that fits within the larger narrative of their whole life (habituation).As autobiographical memories infuse more contextual information into the "hot" sensory memories in the fear network, the network gradually "cools down", there is a gradual habituation of the emotional response to the traumatic memory and the PTSD symptoms.

This process of cooling down or habituation of the fear network can happen in several ways. For example, the fragmented and disorganized narration of traumatic memories by patients usually impair their ability to see the continuity between their various life experiences and the contexts in which they occur (Ehlers& Clark, 2000).Talking about the traumatic events in context of their life narrative helps them integrate their psycho-physiological

and somato sensory experiences and responses into the time and space context in which they occurred. Anchoring the traumatic memory to a specific time and space in turn helps reduce perceptions of current threat, as it helps them understand the original conditions under which they acquired the fear response and how it continues to occur in their current life ((Robjant & Fazel, 2010), with the internal and external cues that trigger it.

Ultimately, the person is able to weave the fragments of their story into a "cool-system frame work" which enables them to regulate the triggers associated with the "hot" emotional memories (Schauer, Neuner, & Elbert2005). VanderKolk, vander Hart and Marmar (1996:322) eloquently summarize the process by explaining that" one of the reasons why reliving a trauma in night mares and flash backs is not an effective means of memory processing is that some fragments of the event remain dissociated from other elements of what has to become an integrated, semantically represented, autobiographical memory".

Another advantage of Narrative Exposure Therapy is that in the process of constructing a narrative it allows the client to feel that he or she have been accompanied through the experience, narration of event that took place and documentation of their traumatic experiences, where the therapist acts as an audience and witness to the ordeals of the client (Neuner, Schauer, Elbert & Roth 2002; Schauer, Neuner & Elbert 2005). Finally, at each point of therapy session the autobiography will be recorded by the therapist and corrected with subsequent reading to the participant at the beginning of the next session and at the last session the participants will receive a written report of his biography.

2.4 Summary of Review of Empirical Literature

This chapter was discussed by reviewing key variables such as psychological theories (behavioural, cognitive, psychodynamic), history of PTSD, traumatic event and PTSD ,risk factors for Post-Traumatic Stress Disorder, psychological treatment of trauma and PTSD and the efficacy of psychological treatment for PTSD .Literature reviewed revealed that there is a dearth of studies regarding the use of Narrative Exposure Therapy as treatment for Post-traumatic Stress Disorder among Internally Displaced Persons (IDPs) in Nigeria. Literature search revealed that NET is an entirely new therapy in sub-Saharan Africa that has not been explored in the treatment of PTSD. Also, the review found that empirical studies of the mental health of IDPs in Nigeria have been largely neglected.

Furthermore, experimental studies regarding mental health treatment for IDPs in Nigeria were non-existent in the literature. These gaps in the literature attest to the need for empirical studies of therapeutic packages that will be effective on the mental health of IDPs; hence this study intends to fill the existing gaps in literature.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter presents the method used in conducting the research. The study was done under the following sub-headings: design, participants, instrument for data collection, procedure for data collection, method of data analysis and ethical considerations for the study.

3.1 Research Design

The study was a two group (control and intervention) experimental study which examined pre-test/post-test outcomes. The design ensures that the study has a strong internal validity. This allowed for participants to be randomly assigned to two groups. Both groups were pre-tested and post-tested on their trauma symptoms.

Thereafter, the intervention group was administered treatment, while the other was not. Below is the graphic representation of the design:

$R0_1$	X	0_2	Intervention group
$R0_3$	Blank	0_4	Control group

In the design above, 0_1 and 0_3 in this case represents the pre-test for the experimental and control groups, and O_2 and O_4 represents the post-test for the experimental and control groups, respectively. The R in the illustration indicates the randomization of groups and X for treatment.

3.2 Population, Sample and Sampling Techniques

Participants were 49 Internally Displaced Persons (IDPs), aged 18 to 76 years, at the Stefanos Foundation IDPs Camp. 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 (Appendix 1).

TABLE 1: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS IN THE VALIDATION STUDY

Variables	Frequency	Percentage%
Gender		
Male	123	59.1
Female	85	40.9
Religious affiliation		
Christianity	163	81.9
Islam	36	18.1
Marital Status		
Single	113	57.7
Married	75	38.3
Divorced/separated	5	2.6
Widowed	2	1.0
Cohabiting	1	0.5
Level of education		
Non formal	12	6.9
Primary	7	4.0
Secondary	47	26.9
Tertiary	109	62.3
Occupation		
Professional	97	51.1
Non-professional	41	21.6
Unemployed	52	27.4
Monthly Income		
No income	49	28.8
<N20,000	27	15.9
N20,000-N50,000	39	22.9
>N50,0000	55	32.4

3.3 Methods of 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:

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 survivours. 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

Pilot Study and validation of instruments

A validation study was carried out in six communities of Jos Plateau State that had experienced ethno-religious conflicts within two decades. They were Tudun Wada, Bauchi Road, Jenta Adamu, Angwan Rogo, Bukuru and Giring. There were a total number of 208 participants used in the validation study: 123 (59.1%) were males and 85 (40.9%) were females; 163 (81.9%) were Christians and 36 (18.1%) were Muslims. 113 (57.7%) were single while, 75 (38.3%) were married, 5 (2.6%) were divorced/separated, 2 (1%) widowed, and one cohabitation. Among them 12 (6.9%) had no formal education, 7 (4%) had primary school education, 47 (26.9%) had secondary school education, and 109 (62.3%) attained tertiary education. 97 (51.1%) of them were professionals while 41 (21.6%) were non-professionals and 52 (27.4%) were unemployed (Appendix 2)

The validity of the instrument was determined through item analysis resulting from inter-item correlation coefficients such that items with high inter correlations were retained while those with low correlations coefficient were dropped. All the items had high Cronbach alpha scores within the range of 0.892 to 0.901. All the items were therefore retained (Appendix 3) .The measure of internal consistency indicated the reliability of the instrument with the Cronbach alpha score of 0.896. The items Cronbrach alpha values ranged

from 0.694 for Dissociation, 0.546 for Anxiety, 0.651 for Depression, 0.638 for Sexual Abuse Trauma Index , 0.722 for Sleep Disturbance, 0.714 for Sexual Problems and the overall reliability index of the TSCL-40 was 0.896 (Appendix 4) .

3.4 Procedure

Following the validation of the instrument, the study was carried out at Stefanos Internally Displaced Persons (IDPs) camp behind Zang Commercial Secondary School, Jos South Local Government Area of Plateau State. Official permission was obtained from the Management of the Camp following the presentation of a letter of introduction from the thesis Supervisor. Thereafter, the researcher visited the camp for familiarization and research sensitization. During the visit, IDPs were briefed about the study; its objectives, procedures and anticipated benefits. They were made to anticipate the selection process, which would give everyone an equal opportunity to participate.

Subsequently a research assistant was recruited to conduct the selection and random assignment process of participants to the experimental and control groups. The participants who qualified for selections were those who had met the criteria of DSM 5 for PTSD and had complained of recurrent flash backs of traumatic experience at the point were used for the study. Meeting the eligibility criteria involved assessing participants for PTSD using DSM 5 and TSCL-40 for Psycho traumatic symptoms. A total of 84 participants were assessed using DSM 5 criteria for PTSD and only 49 participants met the criteria. These 49 participants who were then administered the Trauma Symptoms Check List 40 for 29 participants meeting the eligibility status

while 5 participants withdrew from the study, leaving 24 participants to complete participation in the study.

They were allocated into the experimental and control groups with 12 participants in each group randomly assigned by the lottery method. In this case, 'Yes' or 'No' were tagged in twelve (12) folded pieces of papers in a hat for IDPs to pick, one at a time until the last IDP picked. Participants were eventually selected for the intervention (NET) and control group. As soon as this was concluded, four research assistants (clinical psychologists) with clinical practice were recruited. They were trained for three days on the NET therapy protocol.

These eventually provided the stipulated interventions for the participants who were assigned to the intervention group (NET); there were a total of ten therapy sessions lasting between 60 and 90 minutes per session with the therapists. Interventions were delivered according to 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 control groups to determine the baseline psycho traumatic symptoms. After the 10 sessions had been concluded, a post test assessment using TSCL-40 was done for both groups.

Finally, participants in the control group were debriefed after the post test. As an ethical obligation the researcher paid attention to their needs and concerns which were addressed within the context of the psycho social support programme of Stefanos Foundation for the IDPs (Appendix, 5, 5.1 & figure 1).

3.5 Techniques for Data Analysis

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

3.6 Justification of the Methods

The findings of the study will

i. Indicate the prevalence of PTSD among IDPs in camp
ii. Demonstrate the effectiveness of NET in the management of psychological trauma among IDPs with PTSD
iii. Find out the determinants of the efficacy of NET in the management of psychological trauma among IDPs with PTSD
iv. Provide indicators for the provision of psychological service to internally displaced victims of trauma in camp.

3.7 Ethical Considerations

The ethical consideration for the study includes; obtaining institutional permission to conduct the study following an informed consent which was obtained from the participants. The researcher guaranteed informed confidentiality of pre and post-test status of participants in the study. Participants who were positive on PTSD and the scales of TSCL-40 were given brief NET. The control group was also protected from physical or psychological harm, through psychosocial support. Finally all participants

were not compelled to be part of the study; their right to withdraw at any time without adverse consequences was also assured and guaranteed.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

This chapter presents an initial result of clinical screening of 84 IDPs in the Stefanos Foundation IDP Camp using the DSM V criteria for Post-traumatic Stress Disorder (PTSD). This form the basis for the assessment of index cases using TSCL-40.The reason was to discover or find out the symptoms patterns of those cases on the checklist. The screening found 49 out of 84 IDPs to the positive of PTSD.

4.1 Data Presentation

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

Table 2: 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 2, presented the mean score of psychological trauma symptoms and it 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 3 below presents the outcome of further screening of 49 initially identified index cases for PTSD who attained the cut off score for TSCL-40. 24 persons met the criteria and were therefore adopted as participants for the main study. In so doing they were differentiated into intervention and control groups.

Table 3: Pre-test distribution of psychological trauma symptoms between study group

	Control 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 3, shows the pre-test results for the twenty-four (24) study participants revealed the following psychological trauma symptoms; the intervention group (Narrative Exposure Therapy – NET) 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 control group had higher mean scores on sleep disturbance (14.17, SD=2.04), and sexual problems (9.92, SD=5.53). Overall, the intervention group had a slightly higher mean score on psychological trauma symptoms (75.50, SD=14.15). Figure 1 below shows the mean psychological trauma symptom variation between study groups.

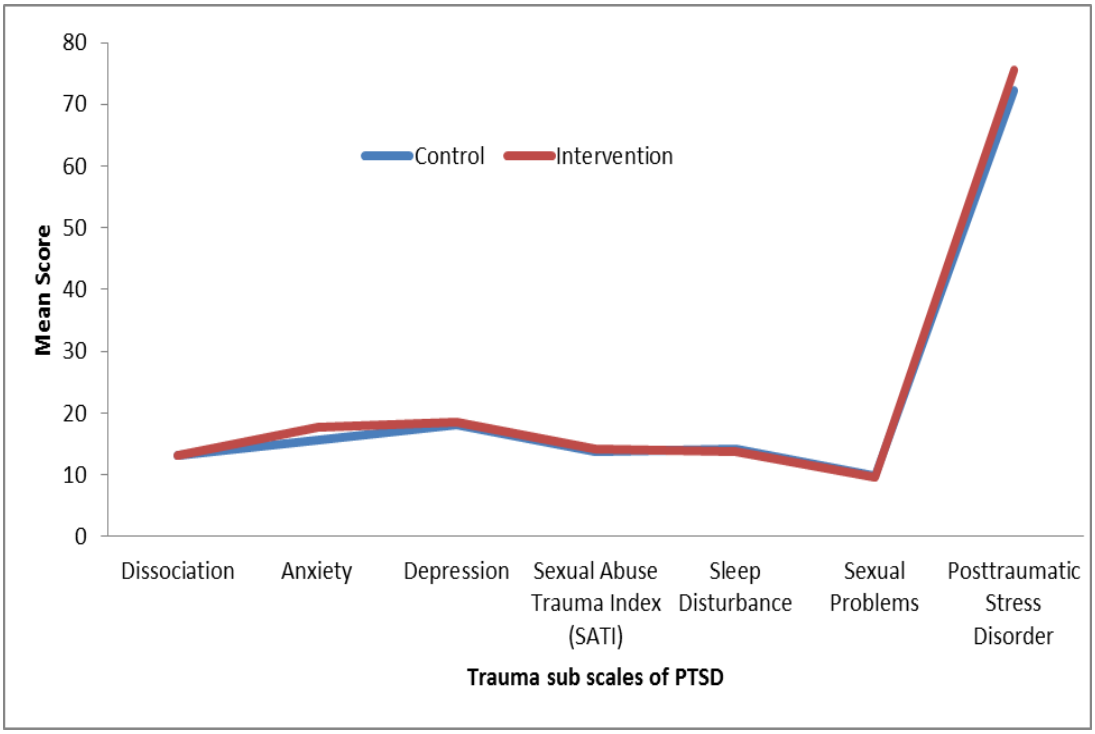


Figure 1: Pre-test Mean Scores on Psychological Trauma Subscales of Participants across Study Group (N = 24)

Table 4 below presents the outcome of result for 24 participants differentiated into intervention and control groups at the end of study.

Table 4: Post-test distribution of psychological trauma symptoms between study group

	Control 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 4 above 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 control group (31.35, SD=28.50). Figure 2 below, shows the mean psychological trauma symptom variation between study groups. The result of the post test score for the control group showed remarkably high elevations on all the symptoms of TSCL-40. While the intervention group had a significant reduction of symptoms indicating that NET was an efficacious intervention on psychological trauma.

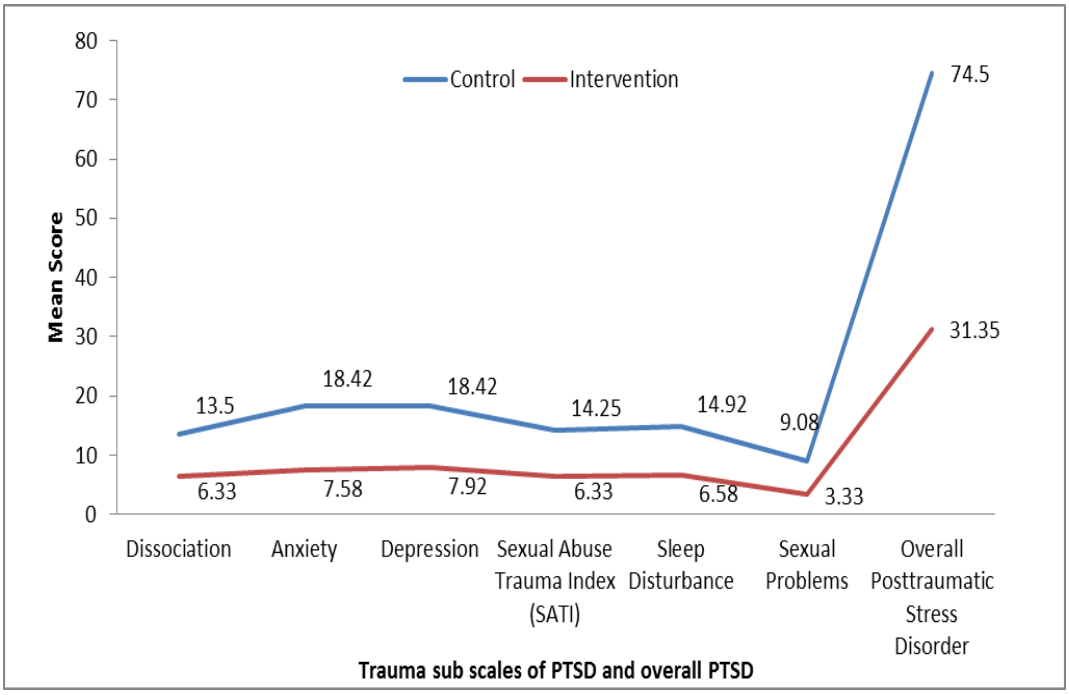


Figure 2: Post-test mean scores on psychological trauma symptoms across study group (N = 24)

4.2 Data Analysis and Results

Four hypotheses were tested with the one-way Analysis of Variance (ANOVA) at 0.05 significance level to examine the different variable relations in the study. In testing these hypotheses, the symptoms presentation of participants were determined and further tested on the terms of respective hypotheses.

Hypothesis One

Hypothesis one stated that Narrative Exposure Therapy (NET) will have a significant effect on psychological trauma among Internally Displaced Persons (IDPs) with PTSD.

Table 5: Mean scores of psychological trauma symptom across study group

	Study Group							
	Control 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

Table 5, shows the mean score of psychological trauma symptoms across the study group. The results revealed that the intervention group had lower scores on dissociation (Mean= 6.33, SD=5.11), anxiety (Mean=7.58, SD=6.56), depression (Mean=7.92, SD=7.72), sexual abuse trauma (Mean=6.33, SD=5.47), sleep disturbance (Mean=6.58, SD= 4.74), and sexual problems

(Mean= 3.33, SD= 5.74). Also, the intervention group had lower psychological trauma mean score than the control group (Mean=31.35, SD=28.50).

Effect of NET on psychological trauma symptoms across study groups

The one way ANOVA results revealed that Narrative Exposure Therapy (NET) had a significant effect on lowering dissociation (F = 13.902, p = 0.001), anxiety (F = 16.448, p = 0.001), depression (F = 12.398, p = 0.002), sexual abuse trauma (F = 16.385, p = 0.001), sleep disturbance (F = 26.506, p = 0.0005), and sexual problems (F = 5.791, p = 0.025). Table 5 shows the details of the results. There was a significant effect of NET on Psychological trauma symptoms, F (1, 22) = 15.303, p = 0.001 (p<.05); with participants exposed to NET with significantly lower levels of Psychological trauma symptoms than the control group. The hypothesis was supported. This implies that NET is an efficacious treatment for individuals with Psychological trauma.

Table 6: One way ANOVA table for psychological trauma symptoms across study group (Post-test)

	Sum of Squares	df	Mean Square	F	Sig.
Dissociation					
Between Groups	308.167	1	308.167	13.902	.00
Within Groups	487.667	22	22.167		1
Total	795.833	23			
Anxiety					
Between Groups	704.167	1	704.167	16.448	.00
Within Groups	941.833	22	42.811		1
Total	1646.000	23			
Depression					
Between Groups	661.500	1	661.500	12.398	.00
Within Groups	1173.833	22	53.356		2

Total	1835.333	23			
Sexual Abuse Trauma Index (SATI)					
Between Groups	376.042	1	376.042	16.385	.00
Within Groups	504.917	22	22.951		1
Total	880.958	23			
Sleep Disturbance					
Between Groups	416.667	1	416.667	26.506	.00
Within Groups	345.833	22	15.720		05
Total	762.500	23			
Sexual Problems					
Between Groups	198.375	1	198.375	5.791	.02
Within Groups	753.583	22	34.254		5
Total	951.958	23			

Hypothesis Two

Hypothesis two stated that there will be a significant gender differences in the efficacy of Narrative Exposure Therapy (NET) on psychological trauma among IDPs with PTSD.

Table 7: Mean scores of psychological trauma symptoms of across gender for participants with posttraumatic stress disorder across gender (N = 12)

	Gender							
	Male				Female			
	f	%	Mean	SD	f	%	Mean	SD
Dissociation	2	16.7	9.50	5.45	2	16.7	4.75	4.43
Anxiety	2	16.7	12.00	8.76	1	8.3	5.38	4.24
Depression	1	8.3	12.00	10.10	1	8.3	5.88	5.96
SATI	2	16.7	10.50	5.97	1	8.3	4.25	4.10
Sleep Disturbance	1	8.3	7.50	6.14	2	16.7	6.13	4.29
Sexual Problems	1	8.3	6.50	8.58	2	16.7	1.75	3.41

Table 7 shows the mean scores of psychological trauma symptoms across gender for participants with PTSD. The results revealed that females exposed to NET had lower scores than males exposed to NET on dissociation (Mean=4.75, SD=4.43), anxiety (Mean=5.38, SD= 4.24), depression (Mean=5.88, SD=5.96), sexual abuse trauma (Mean=4.25, SD=4.10), sleep disturbance (Mean=6.13, SD=4.29), and sexual problems (Mean=1.75, SD=3.41). Furthermore, the females had lower mean score on psychological trauma than male participants (Mean= 23.25, SD=20.49).

Gender differences in the Efficacy of Narrative Exposure Therapy (NET) on psychological trauma symptoms of participants with posttraumatic stress disorder

One way ANOVA results showed that male and female participants exposed to Narrative Exposure Therapy (NET) had similar levels of symptoms experience on dissociation ($F = 2.656$, $p = 0.134$), anxiety ($F = 3.289$, $p = 0.100$), depression ($F = 1.803$, $p = 0.209$), sexual abuse trauma ($F = 4.640$, $p = 0.057$), sleep disturbance ($F = 0.208$, $p = 0.658$), and sexual problems ($F = 1.989$, $p = 0.189$). Table 7 below shows the details of the results.

Table 7: One way ANOVA table for psychological trauma symptoms across gender (Intervention Group)

	Sum of Squares	df	Mean Square	F	Sig.
Dissociation					
Between Groups	60.167	1	60.167	2.656	.134
Within Groups	226.500	10	22.650		
Total	286.667	11			
Anxiety					
Between Groups	117.042	1	117.042	3.289	.100
Within Groups	355.875	10	35.588		
Total	472.917	11			
Depression					
Between Groups	100.042	1	100.042	1.803	.209
Within Groups	554.875	10	55.488		
Total	654.917	11			
Sexual Abuse Trauma Index (SATI)					
Between Groups	104.167	1	104.167	4.640	.057
Within Groups	224.500	10	22.450		
Total	328.667	11			
Sleep Disturbance					
Between Groups	5.042	1	5.042	.208	.658
Within Groups	241.875	10	24.188		
Total	246.917	11			
Sexual Problems					
Between Groups	60.167	1	60.167	1.989	.189
Within Groups	302.500	10	30.250		
Total	362.667	11			

Hypothesis Three

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

Table 8: 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 6 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). Table 8 below shows the details of the result.

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 hypothesis 3. 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 9 below shows the details of the results.

Table 9: 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	3.9	.076
Within Groups	206.000	10	20.600	16	
Total	286.667	11			
Anxiety					
Between Groups	130.667	1	130.667	3.8	.079
Within Groups	342.250	10	34.225	18	
Total	472.917	11			
Depression					
Between Groups	322.667	1	322.667	9.7	.011
Within Groups	332.250	10	33.225	12	
Total	654.917	11			
Sexual Abuse Trauma Index (SATI)					
Between Groups	60.167	1	60.167	2.2	.165
Within Groups	268.500	10	26.850	41	
Total	328.667	11			
Sleep Disturbance					
Between Groups	60.167	1	60.167	3.2	.103
Within Groups	186.750	10	18.675	22	
Total	246.917	11			
Sexual Problems					
Between Groups	145.042	1	145.042	6.6	.027
Within Groups	217.625	10	21.763	65	
Total	362.667	11			

Hypothesis Four

Hypothesis four stated that Narrative Exposure Therapy (NET) will be more effective on psychological trauma of IDPs with higher level of education than IDPs with lower level of education with PTSD.

Table 10: Post-test Mean Scores of Psychological Trauma Symptoms of Participants with Posttraumatic Stress Disorder across Level of Education

	Mean Score	Standard Deviation	Overall Mean	Overall SD
Dissociation				
No formal Education	6.83	4.96	6.33	5.11
Primary Education	6.60	5.98		
Secondary Education	2.00	-		
Anxiety				
No formal Education	7.17	3.76	7.58	6.56
Primary Education	9.20	9.45		
Secondary Education	2.00	-		
Depression				
No formal Education	8.17	6.08	7.92	5.47
Primary Education	8.80	10.38		
Secondary Education	2.00	-		
Sexual Abuse Trauma Index (SATI)				
No formal Education	5.83	4.58	6.33	4.74
Primary Education	7.80	6.94		
Secondary Education	2.00	-		
Sleep Disturbance				
No formal Education	6.33	4.76	6.58	4.74
Primary Education	7.80	5.12		
Secondary Education	2.00	-		
Sexual Problems				
No formal Education	2.33	3.88	3.33	5.74
Primary Education	5.20	7.95		
Secondary Education	.00	-		

Table 10 shows mean scores of psychological trauma symptoms of participants across educational levels and it revealed that IDPs with no formal education had slight higher mean score on dissociation (Mean=6.83, SD=4.96), IDPs with primary education had slightly higher mean score on anxiety (Mean=9.20, SD=9.45), depression (Mean=8.80, SD=10.38), sexual abuse trauma (Mean=7.80, SD=7.80), sleep disturbance (Mean=7.80, SD=5.12), and sexual problems (Mean=5.20, SD=7.95). Overall, IDPs with primary education had higher Psychological trauma with mean score (Mean=31.25, SD =28.50). Table 12 shows details of the result.

Effect of Level of Education on the Efficacy of Narrative Exposure Therapy (NET) on Psychological Trauma Symptoms

There were no significant differences on the impact of NET on participants in higher level of education and lower level of education. The hypothesis was therefore rejected. Table 11 shows the details of the results.

Table 11: ANOVA Source Table for Level of Education of IDPs on Psychological Trauma Symptoms

	Sum of Squares	df	Mean Square	F	Sig.
Dissociation					
Between Groups	20.633	2	10.317	.349	.715
Within Groups	266.033	9	29.559		
Total	286.667	11			
Anxiety					
Between Groups	45.283	2	22.642	.477	.636
Within Groups	427.633	9	47.515		
Total	472.917	11			
Depression					
Between Groups	39.283	2	19.642	.287	.757
Within Groups	615.633	9	68.404		
Total	654.917	11			
Sexual Abuse Trauma Index (SATI)					
Between Groups	31.033	2	15.517	.469	.640
Within Groups	297.633	9	33.070		
Total	328.667	11			
Sleep Disturbance					
Between Groups	28.783	2	14.392	.594	.572
Within Groups	218.133	9	24.237		
Total	246.917	11			
Sexual Problems					
Between Groups	34.533	2	17.267	.474	.637
Within Groups	328.133	9	36.459		
Total	362.667	11			

4.3 Discussion of Findings

The purpose of this research was to determine the efficacy of Narrative Exposure Therapy (NET) in resolving psychological trauma symptoms of Internally Displaced Persons (IDPs). Four hypotheses were tested to achieve the purposes of the study.

Results of Hypothesis 1 provided support for the prediction that NET will have a significant effect on psychological trauma. The outcome revealed that NET significantly lowered participants' psychological trauma symptoms level of dissociation, anxiety, depression, sexual abuse trauma, sleep disturbance, and sexual problems. There was a significant overall effect of NET on psychological trauma; with participants exposed to NET significantly having lower levels of psychological trauma than the control group. Similar investigations, by Halvorsen and Stenmark (2010) had demonstrated the effectiveness of NET on a sample of tortured asylum and refugees seekers in Norway where they found out that tortured survivours who had been exposed to ten (10) sessions of NET experienced major reduction in the psychological trauma symptoms from pre-intervention to post-intervention. Also Hijazi, (2012) found that NET reduced psychological trauma among refugees with PTSD.

Furthermore, in line with the outcome of Hypothesis 1, studies (Wagner, Knaevelsrud, & Maercker (2007) have revealed that NET significantly reduced complicated bereavement among PTSD participants in a randomised controlled study. However in a study of randomised traumatised survivours of a motor accident, Zoellner, Rabe, Karl, and Maercker, (2011) reported marginally effect of NET on psychological trauma.

An explanation for this outcome is that, it is likely that any treatment that encourages the survivour to confront the trauma through cognitive processing, exposure, narration, or writing, facilitates survivors' abilities to be aware of experiences and tolerate the various internal stimuli associated with the trauma. This exposure may lead to decreases in experiential avoidance, which in turn could facilitate more opportunities for the cognitive processing and

positive interpretation of the trauma, leading to post-traumatic growth. More so, the process of narrating traumatic experiences and re-experience their horror in the context of a warm empathic relationship elicits strong emotions about the event and in the survivour, such that when this is done with another person, it tends to foster strong feelings of connectedness and intimacy.

In fact, one of the explicit tenets proposed by the developers of Narrative Exposure Therapy is that narrating traumatic experiences to and with a therapist is vital to survivour recovery because it allows the survivour to share his or her burden of the traumatic experience to enable the therapist bear witness to the suffering (Schauer et al., 2005), both of which have powerful, healing effects.

The second hypothesis that there will be a significant gender differences in the efficacy of Narrative Exposure Therapy (NET) on IDPs psychological trauma; was not supported indicating that gender was not a moderating factor for the effect of NET on psychological trauma. This agrees with Smiths (2012) findings which examined gender effects on massage therapy and found that clients had significant pain relief and improved range of motion after treatment with message therapy and these effects were not mediated by gender. However, the finding contrasts with the study of Lans (2016) which revealed that trauma-focused treatment has a positive effect on both males and females. Also, Tarrier, Sommerfield, Pilgrim, and Faragher (2000) reported a better treatment outcome for females suggesting they were more expressive during treatment and thus tend to do better with NET, while men find it difficult to express their psychological difficulties. As such, the results suggest that treatment outcome of NET is not moderated by gender. This holds

implications for NET outcomes suggesting that its beneficial effects transcend the client gender.

This could also be based on the fact that relaxation during NET sessions engendered positive attitudes regardless of the gender of the IDPs, with gender influences being overshadowed by symptomatic relief of trauma symptoms (depression, anxiety, etc), at least in the short run. Furthermore, once a NET session has begun, clients typically become deeply relaxed and become relatively oblivious to their gender and the gender of their therapist. In Narrative Exposure Therapy, therapists themselves are taught to treat all clients similarly and in a respectful and non-sexual manner. This professional pattern of studied neutrality, similar to that within the practice of psychoanalysis, may attenuate the influence of the therapist's gender with the client. This finding may rather be a reflection of the fact that gender is a mere categorization of roles. Also, experimental control factors such as the matching of gender in the study groups could have been responsible for the lack of gender effects.

The outcome of the third hypothesis revealed that NET significantly was more effective on younger IDPs psychological trauma than older IDPs; with younger IDPs who were exposed to NET having lower scores than older IDPs on depression, and sexual problems. This is in line with the study (Alaa, 2012) that revealed that older adults receiving NET generally showed fewer symptoms of post-traumatic stress and depression; and have higher psychological wellbeing and quality of life than younger ones. They spend more time with family and friends as compared to the control group. The direction and trend of results, specifically for psychological trauma symptoms is generally consistent with past trials of NET with refugees and asylum

seekers, which also found that NET is helpful in reducing PTSD symptoms among younger adults (Lans, 2016). In addition other, studies (Maksymilian, Popiel, Zawadzki, & Sedek, 2017; Rizvi, Vogt & Resick, 2009) have found out that younger adults significantly had reduced PTSD symptoms after therapy, while older participants, in difference to the younger participants, showed no increase in reaction time and interference scores in trials where accident photos were presented. This could be because the older subjects may have repressed deep seated emotional conflicts, requiring longer sessions of exploration and processing.

The outcome of hypothesis three 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.

Results of the fourth hypothesis revealed that the Narrative Exposure Therapy (NET) was not significantly more effective for IDPs with higher level of education than IDPs with lower level of education. This contrasts with studies (Ehlers, Clark, Hackmann, McManus, Fennell, 2005; Ebert, Gollwitzer, Riper,

Cuijpers, Baumeister, & Berking, 2013) which revealed that treatment therapy was especially moderated by level of education of clients. Other studies have shown that high level of education is associated with a better treatment outcome for Internet-based therapy intervention studies (Warmerdam, 2010; Riper, Kramer, Keuken, Smit, Schippers, & Cuijpers 2008).

The findings of hypothesis four are however consistent with the findings (Thompson-Brenner et al., 2016) which revealed that level of education was a non-significant moderator for therapeutic treatment. This may have been because the major stimulus for treatment was the personal traumatic experiences of the participants which did not require much mental stimulation as is often the case with internet based therapies.

Although,Narrative exposure therapy (NET) is a relatively new trauma-focused treatment especially in Nigeria. Findings on the therapy from other countries has shown that it is effective among vulnerable groups like refugees, IDPs, and other patients with a history of repeated trauma exposure including patients with borderline personality disorder (BPD) or major depression and comorbid PTSD (Pabst et al., 2014; Gwozdziewycz & Mehl-Madrona, 2013; Robjant & Fazel, 2010). Narrative exposure therapy is indicated for PTSD as a result of repeated trauma. The findings of this study specifically, revealed the effectiveness of NET to reduce psychological trauma symptoms. This is in accordance with studies that show that depressive symptom severity, and anxiety scores related with PTSD declined with NET (Mauritz, Van Gaal, Jongedijk, Schoonhoven, Nijhuis-van der Sanden, & Goossens, 2016; Adenauer, Catani, Gola, Keil, Ruf, Schauer, & Neuner, 2011; Gwozdziewycz & Mehl-Madrona, 2013).

The between group experimental design adopted for the study ensures the randomization of the study participants into the control and experimental (NET) groups. This further allowed for a pre-test and post-test result of NET. As such, the treatment of the experimental group produces the outcomes in the present study. This is in line with studies that have used the between group experimental design to reveal the positive effect of NET on psychological trauma symptoms of PTSD participants (Lans 2016; Adenauer, et al., 2011; Gwozdziewycz & Mehl-Madrona, 2013).

The outcome of this study regarding the positive effect of NET on psychological trauma compares with the outcomes of Cognitive Behavioural Therapy (CBT), cognitive Restructuring, and Rational Emotive Therapy (RET) on PTSD symptoms. For example, Rasing, Creemers, Janssens and Scholte (2017) in a study using CBT on PTSD participants found that symptoms of depression and anxiety were significantly decreased; furthermore, the effect of CBT for PTSD and depressive symptoms was examined and findings revealed reduction of PTSD and depression (Iverson, Gradus, Resick, Suvak, Smith, & Monson, 2011). Also, Nieuwenhuijsen, Verbeek, de Boer, Blonk, & van Dijk, (2010) found that the magnitude and direction of change in irrational beliefs were related to the magnitude of recovery of depressive, anxiety and stress symptoms over time using rational emotive therapy (RET) . These results support the application of general cognitive interventions including NET, especially for patients with depressive or an anxiety disorders.

Narrative Exposure Therapy (NET) is a relatively new concept in trauma treatment in Sub-Saharan Africa, particularly in Nigeria. This is a pioneering

work on the efficacy of NET in reducing symptoms of psychological trauma among IDPs in Nigeria.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The present research had reviewed the term IDPs and their mental health challenges in Nigeria. Findings revealed that there is a dearth of studies regarding the study and management of IDPs psychological trauma. Narrative Exposure Therapy was put to use in the management of Psychological trauma among Internally Displaced Persons (IDPs) in Nigeria. Reviewed literature search had revealed that NET is an entirely new therapy in sub-Saharan Africa that has not been explored in the treatment of psychological trauma among IDPs in Nigeria. Also, the review found that empirical studies on the mental health of IDPs in Nigeria have been largely neglected.

Furthermore, experimental studies regarding mental health management for IDPs in Nigeria are essentially non-existent. These gaps in the literature attested to the use of NET as a therapeutic package on the mental health of IDPs; and the result of the research shows that NET is an effective therapy that can be used in reducing, management and treatment of psychological trauma among IDPS in Nigeria. Hence this study is an attempt in filling existing gaps in literature on the management, treatment of psychological trauma and mental health of IDPs in Nigeria.

5.2 Conclusion

In conclusion, this study demonstrated that Narrative Exposure Therapy (NET) had positive effects on participants' psychological trauma symptoms. More so, 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 would be an effective therapeutic tool for use with the IDPs. This research represents an important contribution to research investigating possibilities and acceptability of psychological interventions with internally displaced persons (IDPs). It is also a representation of the contribution of psychology to the larger field of IDPs mental health. Finally the study supports the view that an effective psychological trauma treatment includes components of active trauma being processed, thus contributing to the evidence based approaches to PTSD treatment.

5.3 Recommendations

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

i. Further research could ascertain the effectiveness of NET in reduction of Post-Traumatic Stress Disorder symptoms to non-clinical levels through a higher number of sessions. Moreover, a control group was used in the study; future research should include robust control or comparison groups, such as supportive counselling, or alternative psychological treatments.

ii. Additional studies should investigate if subtypes of traumatic events have different patterns of responses to the narrative exposure therapy protocol. As such, it is possible that the response of trauma due to torture may be different from traumatic loss or bereavement. Also, it may be helpful to explore individual differences moderating the effects of treatment, such as, cultural background, religious affiliation, and current psychosocial circumstances.

iii. Also, more studies should be conducted amongst children in the IDP camps so that both age levels (young and old) would have gone through the therapy since there is also a procedure for conducting NET for kids (KIDNET) in the NET manual. This will reveal if there are significant differences in NET and KIDNET effects on psychological trauma symptoms.

iv. Future NET and other trauma interventions should study measures of stress outcomes such as grief and resilience to lead to a better understanding of factors that lead to resilience and post traumatic growth among previous victims of psychological trauma.

v. Professionals working within the mental health circle should be encouraged on capacity building and the training of NET specialists to provide services in IDP camps, trauma centres and hospitals.

vi. The federal and state government should in consultation with Nigeria Psychological Association introduce a national and state policy frame work on psychological trauma management to cover victims of disaster, conflict and vulnerable groups in Nigeria.

5.4 Limitations of the Study

A major limitation of the study was the fewer number of NET sessions. It would have been helpful to have more sessions, such as above 10 sessions and in turn would have been more consistent with prior studies of NET to track changes in symptoms and reveal a different pattern of results than the current ones. Thus, more NET sessions and follow-ups could have been helpful for monitoring PTSD symptoms, since the pattern of improvement in some NET research changed drastically from multiple follow-up points.

It was more or less a repeated measures study whose major control factor was randomized assignment of therapist and participants to treatment and control conditions posing a limitation of generalization to the study. A randomized trial with comparative therapies like cognitive behavioural therapy, psychodynamic and humanistic approaches could have yielded better outcomes of the relative efficacy of the therapy.

Finally, the content structure instrument used for the study does not appear to be fully delineated, some domains appear to be conceptually similar to each other such as: sexual abuse trauma and sexual problems. Hence factor analysis could have elicited more definite dimensions of the instrument.

5.5 Suggestions for Further Studies

Researchers in their subsequent studies should endeavor to use larger sample size in order to improve generalizability and applicability of the findings. Meanwhile more studies should be conducted using Nigerian sample from different ethnic and cultural background as it will help to provide clear insight and understanding of PSTD in IDPs. In addition, future studies should include other variables like locality and personality types to ascertain their influence in types to ascertain if such variables influence the genesis of psychological trauma and its management.

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APPENDIX 1A: LETTER OF INTRODUCTION

Andrew E. Zamani, PhD, FNPA, AppN, FNACP
Professor of Clinical Psychology
Department of Psychology, Faculty of Social Sciences,
Nasarawa State University P.M.B. 1022 Keffi, Nigeria.

6th September 2017.

The Director,
Stefanos Foundation,
IDP Camp,
Behind DB Zang Commercial School, Bukuru.

LETTER OF INTRODUCTION

This is to introduce **Samson I Dashit** a PhD Candidate under my Supervision who is conducting a study on the Efficacy of Narrative Exposure Therapy on IDPs.

The protocol of his work has been vetted. It satisfies the ethical requirements of research with human subjects.

Please grant him the assistance he requires.
Thanks.

Prof Andrew E Zamani, PhD.
Supervisor.

Tel: +234 (0)805 958 1331 E-Mail: zamandeza@gmail.com; zamanie@nsuk.edu.ng

APPENDIX 1B: LETTER OF COOPERATION

Stefanos foundation
The rising hope
"Visiting the persecuted in their affliction"

Shop 14/16 Emmanuel Shopping Complex, Bukuru Expressway, Bukuru Jos Sought LGC
Tel: +234(0)7030131963 08037035152
Email: stefanosfdn@yahoo.uk.co,
www.stefanosdation.org,
P.O.Box 1321 Jos, Nigeria .

15Th February, 2018

WITHOUT PREJUDICE

TO WHOM IT MAY CONCERN

RE: SAMSON I. DASHIT (PhD. CANDIDATE)

This is to acknowledge that the above named had undertaken a study on the Efficacy of Narrative Exposure Therapy on IDPs with the IDPs at the Stefanos foundation IDP camp, Bukuru, Jos South.

Kindly accord him the necessary assistance that will facilitate the successful completion of the study.

Thank you.

Yours faithfully,

Engr. Mark Lipdo.
(Program Coordinator)

BOARD OF TRUSTEE: Engr. Samuel Laudo Salifu (Chairman), Rev. Obed Dashan, Mrs. Esther Anaja,
Pastor Mrs. Taiwo Dina, Engr, Mark Lipdo , Prof. Isa'ac Lar (Secretary)

APPENDIX 2: CONSENT FORM

Informed Consent Form
Participant's name: _____
Age: _____ Date of examination: _____
Place of examination: _____
Project title: _____
Project investigators: _____

Explanation of Procedures
I understand that I am being asked to participate in a research study that will explore the effectiveness of therapeutic interventions for reducing symptoms caused by extremely stressful experiences. The treatment approach is called Narrative Exposure Therapy and will require me to create a detailed report of my biography, including traumatic events. With the support of the therapist, I will try to clarify my memories about the traumatic experiences. There will be up to eight therapy sessions once or twice a week that will each last around 60 – 120 minutes. In order to see how helpful this assistance might be, there will be an examination of my symptoms 2 months after the therapy.

Risks and Discomforts
I understand that in the course of the treatment, the recollections of the traumatic events will be encouraged and may cause personal stress. I understand that the recollections of events that have caused great personal stress may evoke feelings of anxiety and frustration.

Benefits
I understand that the benefits I will receive from participation in this study include free examinations and treatments that may reduce the intensity and frequency of symptoms that arose from extremely stressful experiences. Participation in this study does not imply any financial benefits.

Confidentiality
I understand that information gathered during this study will be kept strictly confidential. I agree that the results may be published for scientific purposes, provided my identity is not revealed and cannot be reconstructed on the basis of the published data

Withdrawal With-out Prejudice and Termination
I understand that I am free to withdraw my consent and to discontinue my participation in this project at any time without prejudice against future care. I also understand that my participation in this study may be ended without my consent, if it is determined by the investigators that it is in my best interest or if I significantly fail to follow study procedures.

Cost to Subject from Participation and Payment and Research-Related Injuries
I understand that there will be no cost for my participation in this study. All examinations and treatments associated with the project will be free; the researcher has made no provision for financial compensation in the case of physical or psychological injury resulting from this research.

Legal Rights
I will receive a copy of this informed consent. I am not waiving any of my legal rights by signing this consent form. My signature indicates that I agree to participate in this study.

Agreement
My signature indicates that I have decided to participate, that I have read (or had read to me) the information provided above, and that I have received a copy of this consent form.

_____
Signature and date of patient

_____
Signature and date of therapist

_____
Signature and date of witness

APPENDIX 3: STUDY QUESTIONNAIRE

Nassarawa State University,
Keffi, Nassarawa State

Dear Respondent,

I am a Ph.D. student of the department of Psychology in the above named institution undertaking a research on individual appraisal regarding some statements. The question below seeks your honest response. Please respond appropriately to the option that best relates to you. All responses are strictly for research purposes and shall be kept confidential. Thank you for your response.

Dashit Samson Ishaya

SECTION I

Please tick or specify the answer that is correct for you

1. **Age in years** _____
2. **Gender**: Male [ ] Female [ ]
3. **Level of Education:** No formal education [ ] Completed Primary school [ ] Completed Secondary school [ ], Completed Higher Education [ ]
4. **Marital Status**: Never married [ ] Married [ ] previously married (Separated/Divorced) [ ] Widowed [ ] Co- habiting [ ]
5. **State of Origin**:_____
6. **Occupational group**

   Group I consists of professionals with university degrees (e.g doctors, teachers and government officers); Group II consists of professionals without university degrees (administrators, large-scale farmers, entrepreneurs and armed forces officers). Group III consists of clerks, motor vehicle drivers, mechanics, tailors, butchers, soldiers, police and small-scale entrepreneurs). Group IV consists of barbers, goldsmiths, palm wine tapers and small-scale

farmers). Groups V include laborers and petty traders. Group VI consists of full time house wives, unemployed educated youths and apparent.

Please specify from categories above which one you belong to by ticking the corresponding group below:

a. Group 1-11---professionals [ ]

b. Group 111-V---non-professionals [ ]

c. Group V1-------unemployed [ ]

7. **Monthly Income (Individual):** No income [ ] <₦20,000.00[ ]

₦ 20,000-50,000[ ] ₦ 50,000.00[ ]

8. **Religious Affiliation:** Christianity [ ] Islam [ ] Others:_____

9. **Ethnicity**_____

SECTION II – Trauma Check List

INSTRUCTION: Below are some statements, please indicate how often have you experienced each of the following in the last two months?

0 = Never 1= Almost never 2 = Sometimes 3 = Often

1	Headaches	0	1	2	3
2	Insomnia (trouble getting to sleep)	0	1	2	3
3	Weight loss (without dieting)	0	1	2	3
4	Stomach problems	0	1	2	3
5	Sexual problems	0	1	2	3
6	Feeling isolated from others	0	1	2	3
7	Flashbacks" (sudden, vivid, distracting memories)	0	1	2	3
8	Restless sleep	0	1	2	3
9	Low sex drive	0	1	2	3
10	Anxiety attacks	0	1	2	3
11	Sexual over activity	0	1	2	3
12	Loneliness	0	1	2	3
13	Nightmares	0	1	2	3
14	Spacing out" (going away in your mind)	0	1	2	3
15	Sadness	0	1	2	3
16	Dizziness	0	1	2	3
17	Not feeling satisfied with your sex life	0	1	2	3
18	Trouble controlling your temper	0	1	2	3
19	Waking up early in the morning and can't get back to sleep	0	1	2	3
20	Uncontrollable crying	0	1	2	3
21	Fear of men	0	1	2	3
23	Not feeling rested in the morning	0	1	2	3
24	Having sex that you didn't enjoy	0	1	2	3
25	Trouble getting along with others	0	1	2	3
26	Memory problems	0	1	2	3
27	Desire to physically hurt yourself	0	1	2	3
28	Fear of women	0	1	2	3
29	Waking up in the middle of the night	0	1	2	3
30	Bad thoughts or feelings during sex	0	1	2	3
31	Passing out	0	1	2	3
32	Feeling that things are "unreal”	0	1	2	3
33	Unnecessary or over-frequent washing	0	1	2	3
34	Feelings of inferiority	0	1	2	3
35	Feeling tense all the time	0	1	2	3
36	Being confused about your sexual feelings	0	1	2	3
38	Desire to physically hurt others	0	1	2	3
39	Feelings of guilt	0	1	2	3
40	Feelings that you are not always in your body Having trouble breathing	0	1	2	3

APPENDIX 4A:

NARRATIVE EXPOSURE THERAPY PROTOCOL

The therapy is a short-term standardized psychological intervention that was developed by a European group of researchers and service providers with skill in the fields of psychotraumatology, public health, behavioural neuroscience and human rights advocacy (Schauer et al., 2005: Hijazi,2012). The purpose for developing the instrument was to alleviate Post Traumatic Stress Disorder and other psychological symptoms in survivours of planned violence and is anchored on traditional trauma, focused cognitive behaviour therapy as well as testimony therapy. Narrative Exposure Therapy involves having the client to continually speak about their traumatic events or experiences and process their emotional reactions. The assumption is that the client continues to process the trauma and their reactions to it, they are also better able to weave a coherent narrative about their negative experience.

The process of re-experiencing and constructing a narrative finally leads to the gradual habituation of the emotional response in most clients, which leads to a reduction of symptoms. The study specifies ten sessions of, 60-90 minute structured sessions.

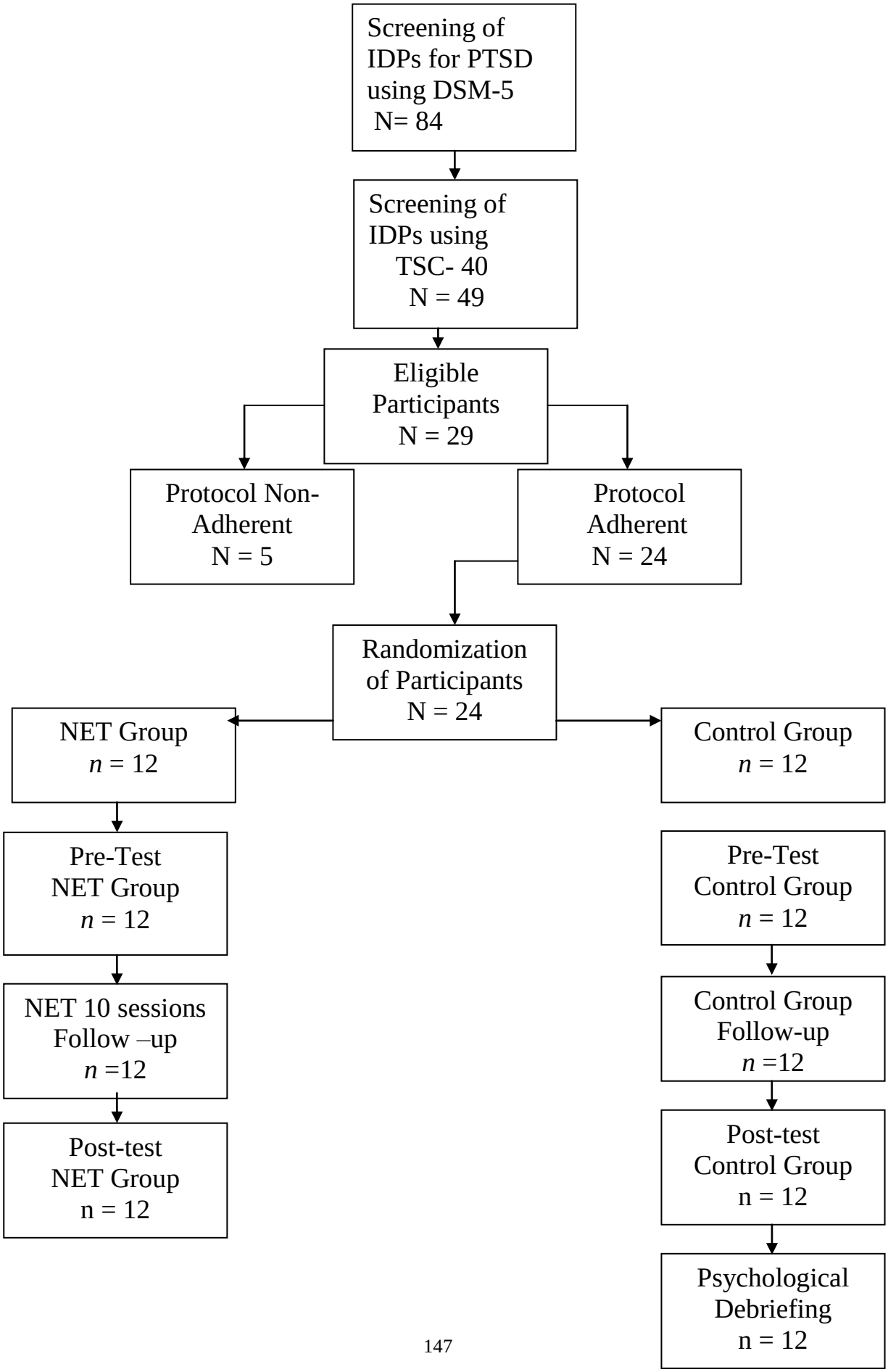
APPENDIX 4B: NET INTERVENTION PLAN AND DELIVERY GUIDELINE

SESSIONS	THERAPY	SUMMARY OF INTERVENTION	PURPOSE
First Session:	Psycho-education	-Introduction between the therapist and client was done. -The therapist explained the purpose and process of the research to the client. -The therapist explained ethical stance to the client and informed consent was subsequently signed.	Enlightenment and creating rapour between the therapist and client.
Second Session:	Testimony Therapy	-The client laid symbols as rope (representing his/her life line,) -The flowers laid on the rope, represent positive events such as joy and happiness. -The stones laid on the rope, represents negative event such as stressful, trauma or sad experience for the Purpose of identifying such events in the clients' life history. -The life line was concluded within one session as instructed by the NET manual.	Laying out the Lifeline
Third, Fourth and Fifth Sessions	Narrative Therapy	The therapist exposes the client to the flowers (positive experiences) and stones (negative experiences) already lay by the client as at the second session.	Habituation was the focal point of the therapist in these sessions.

Sixth, Seventh, Eighth, Ninth Sessions:	Exposure Therapy	-The therapist using NET focused on the stones in which negative experiences bring about PTSD symptoms for the client. -The therapist re-read the narrative to the client for the purpose of promoting engagement in exposure to traumatic experiences and by not avoiding and eventually the clients experienced habituation. -The therapist, client and witness (translator) signed the narrative which became an official document after it was re-read to the client and corrections were effected to suite the clients narratives. - The therapist discussed hope of the client's future and the clients have high expectations and were having positive hopes.	Gradual habituation of emotional response in most clients, which leads to a reduction of PTSD symptoms.

Tenth Session	Cognitive Behavioural Therapy	-The therapist Laid out the final Lifeline: stones representing negative, losses, and violent events. While flowers representing positive events, hopes, wishes for the future of the client.	Re-directing the client's thoughts to the here and now. Also, there perception of the world towards positive expectations.

APPENDIX 5: PARTICIPATION CHART OF THE STUDY



APPENDIX 6: DATA ANALYSIS RESULT TABLES

Appendix 6A: Socio-demographic Characteristics of Baseline Participants (N = 49)

	Frequency	Percentage %
Age Mean ±SD	33.04±11.49	
Age Category		
Younger age (18-35 years)	31	63.3
Older age (36-76 years)	18	36.7
Gender		
Male	18	36.7
Female	31	63.3
Religious Affiliation		
Christianity	49	100.0
Marital Status		
Single	14	29.2
Married	30	62.5
Separated/Divorced	4	8.3
Occupation		
Non-professional	18	36.7
Professional	2	4.1
Unemployed	29	59.2
Monthly Income		
No income	23	65.7
< N20, 000	7	20.0
N20, 000 – N50, 000	4	11.4
> N50, 000	1	2.9

APPENDIX 6B: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS IN THE VALIDATION STUDY

	Frequency	Percentage%
Gender		
Male	123	59.1
Female	85	40.9
Religious affiliation		
Christianity	163	81.9
Islam	36	18.1
Marital Status		
Single	113	57.7
Married	75	38.3
Divorced/separated	5	2.6
Widowed	2	1.0
Cohabiting	1	0.5
Level of education		
Non formal	12	6.9
Primary	7	4.0
Secondary	47	26.9
Tertiary	109	62.3
Occupation		
Professional	97	51.1
Non-professional	41	21.6
Unemployed	52	27.4
Monthly Income		
No income	49	28.8
<N20,000	27	15.9
N20,000-N50,000	39	22.9
>N50,0000	55	32.4

APPENDIX 6C: ITEM ANALYSIS - TRAUMA CHECK LIST 40

s/n	Item	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q1	Headaches	40.58	.216	.896
Q2	Insomnia	41.20	.432	.894
Q3	Weight loss (without dieting)	41.36	.268	.896
Q4	Stomach problems	41.00	.298	.896
Q5	Sexual problems	41.61	.310	.893
Q6	Feeling isolated from others	41.35	.467	.894
Q7	"Flashbacks" (sudden, vivid, distracting memories)	41.03	.436	.893
Q8	Restless sleep	41.14	.474	.895
Q9	Low sex drive	41.42	.349	.894
Q10	Anxiety attacks	41.22	.410	.895
Q11	Sexual over activity	41.38	.310	.894
Q12	Loneliness	41.13	.436	.892
Q13	Nightmares	41.07	.537	.892
Q14	"Spacing out" (going away in your mind)	41.12	.529	.892
Q15	Sadness	40.84	.398	.894
Q16	Dizziness	40.89	.448	.893
Q17	Not feeling satisfied with your sex life	41.21	.448	.895
Q18	Trouble controlling your temper	41.02	.372	.893
Q19	Waking up early in the morning	40.92	,478	.893
Q20	Uncontrollable crying	41.60	.468	.894
Q21	Fear of men	41.21	.376	.895
Q22	Not feeling rested in the morning	41.12	.360	.893
Q23	Having sex that you didn't enjoy	41.28	.484	.892
Q24	Trouble getting along with others	41.34	.540	.893
Q25	Memory problems	41.49	.516	.893
Q26	Desire to physically hurt yourself	41.79	.501	.895
Q27	Fear of women	41.41	.327	.894
Q28	Waking up in the middle of the night	41.00	.390	.894
Q29	Bad thoughts or feelings during sex	41.38	.429	.894
Q30	Passing out	41.54	.385	.894
Q31	Feeling that things are "unreal"	41.23	.376	.892
Q32	Unnecessary or over-frequent washing	41.47	.514	.894
Q33	Feelings of inferiority	41.34	.376	.893
Q34	Feeling tense all the time	41.37	.514	.892
Q35	Being confused about your sexual feelings	41.39	.463	.893
Q36	Desire to physically hurt others	41.74	.285	.896
Q37	Feelings of guilt	41.26	.467	.893
Q38	Feeling that you are not always in your body	41.64	.440	.894
Q39	Having trouble breathing	41.47	.112	.901
Q40	Sexual feelings when you shouldn't have them	41.42	.209	.897

APPENDIX 6D: ALPHA COEFFICIENT OF TRAUMA CHECK LIST 40 (N=208)

Scale	Number of Items	Cronbach Alpha
Dissociation	6	.694
Anxiety	9	.546
Depression	9	.651
Sexual Abuse Trauma Index (SATI)	7	.638
Sleep Disturbance	6	.722
Sexual Problems	8	.714
Trauma Check List – 40	40	.896

Appendix 6E: SPSS Outputs

Frequencies

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age	202	17	63	33.50	9.941
Checklist	208	6	82	42.33	17.456
Valid N (listwise)	202				

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	123	59.1	59.1	59.1
	Female	85	40.9	40.9	100.0
	Total	208	100.0	100.0	

Religious affiliation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Christianity	163	78.4	81.9	81.9
	Islam	36	17.3	18.1	100.0
	Total	199	95.7	100.0	
Missing	System	9	4.3		
Total		208	100.0		

Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never married	113	54.3	57.7	57.7
	Married	75	36.1	38.3	95.9
	Divorced/separated	5	2.4	2.6	98.5
	Widowed	2	1.0	1.0	99.5
	Cohabiting	1	.5	.5	100.0
	Total	196	94.2	100.0	
Missing	System	12	5.8		
Total		208	100.0		

Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Professional	97	46.6	51.1	51.1
	Non-professionals	41	19.7	21.6	72.6
	Unemployed	52	25.0	27.4	100.0
	Total	190	91.3	100.0	
Missing	System	18	8.7		
Total		208	100.0		

Level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non formal	12	5.8	6.9	6.9
	Primary school	7	3.4	4.0	10.9
	Secondary	47	22.6	26.9	37.7
	Tertiary	109	52.4	62.3	100.0
	Total	175	84.1	100.0	
Missing	System	33	15.9		
Total		208	100.0		

Monthly income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No income	49	23.6	28.8	28.8
	< N20,000	27	13.0	15.9	44.7
	N20,000 - N50,000	39	18.8	22.9	67.6
	> N50,000	55	26.4	32.4	100.0
	Total	170	81.7	100.0	
Missing	System	38	18.3		
Total		208	100.0		

State of origin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	1.4	1.4	1.4
	ABIA	5	2.4	2.4	3.8
	ADAMAWA	1	.5	.5	4.3
	AKWA IBOM	2	1.0	1.0	5.3
	ANAMBRA	7	3.4	3.4	8.7
	BAUCHI	8	3.8	3.8	12.5
	BENUE	9	4.3	4.3	16.8
	BORNO	4	1.9	1.9	18.8
	DELTA	1	.5	.5	19.2
	EDO	1	.5	.5	19.7
	EKITI	1	.5	.5	20.2
	GOMBE	1	.5	.5	20.7
	IMO	3	1.4	1.4	22.1
	JIGAWA	1	.5	.5	22.6
	KADUNA	16	7.7	7.7	30.3
	KANO	3	1.4	1.4	31.7
	KATSINA	1	.5	.5	32.2
	KOGI	8	3.8	3.8	36.1
	LAGOS	1	.5	.5	36.5
	NASSARAWA	7	3.4	3.4	39.9
	OGUN	1	.5	.5	40.4
	ONDO	1	.5	.5	40.9
	OSUN	1	.5	.5	41.3
	OYO	5	2.4	2.4	43.8
	PLATEAU	112	53.8	53.8	97.6
	SOKOTO	1	.5	.5	98.1
	TARABA	4	1.9	1.9	100.0
	Total	208	100.0	100.0	

Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		43	20.7	20.7	20.7
	AFIZERE	2	1.0	1.0	21.6
	BEROM	20	9.6	9.6	31.3
	BOKKOS	1	.5	.5	31.7
	BUJI	1	.5	.5	32.2
	BURAH	2	1.0	1.0	33.2
	EBIRA	2	1.0	1.0	34.1
	EFIK	1	.5	.5	34.6
	EGGON	1	.5	.5	35.1
	ENUGU	1	.5	.5	35.6
	FIER	2	1.0	1.0	36.5
	FULANI	4	1.9	1.9	38.5
	GBAGI	1	.5	.5	38.9
	GEOMAI	1	.5	.5	39.4
	GOMAI	1	.5	.5	39.9
	HAUSA/FULANI	17	8.2	8.2	48.1
	HEGGI	1	.5	.5	48.6
	IBIBIO	1	.5	.5	49.0
	IBIE-MUCIYA	1	.5	.5	49.5
	IDOMA	7	3.4	3.4	52.9
	IGALA	1	.5	.5	53.4
	IGBO	12	5.8	5.8	59.1
	IRIGWE	5	2.4	2.4	61.5
	ISOKO	1	.5	.5	62.0
	JABA	7	3.4	3.4	65.4
	JUKUN	2	1.0	1.0	66.3
	KAGOMA	1	.5	.5	66.8
	KATA0	1	.5	.5	67.3
	KATAF	1	.5	.5	67.8
	KOWA	1	.5	.5	68.3
	KUTEP	1	.5	.5	68.8
	LANGTANG NORTH	1	.5	.5	69.2
	MADA	2	1.0	1.0	70.2
	MANGU	3	1.4	1.4	71.6
	MOEDA	1	.5	.5	72.1
	MUPUN	5	2.4	2.4	74.5
	MWAGAVOUL/ MUPUN	13	6.3	6.3	80.8
	NGAS	8	3.8	3.8	84.6
	OTUO	1	.5	.5	85.1
	PYEM	2	1.0	1.0	86.1
	RON	3	1.4	1.4	87.5
	RUKUBA	4	1.9	1.9	89.4
	SHOLIO (MORO'A)	1	.5	.5	89.9
	TAL	1	.5	.5	90.4
	TAROH	4	1.9	1.9	92.3
	TAROK	1	.5	.5	92.8
	TIV	1	.5	.5	93.3
	TULA WANGE	1	.5	.5	93.8
	WUMBA	1	.5	.5	94.2
	YORUBA	12	5.8	5.8	100.0
	Total	208	100.0	100.0	

Item Analysis - Trauma Check List 40

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
42.33	304.706	17.456	40

Item Statistics

	Mean	Std. Deviation	N
Headaches	1.75	.800	208
Insomnia	1.13	1.011	208
Weight loss (without dieting)	.97	.973	208
Stomach problems	1.33	.963	208
Sexual problems	.72	.916	208
Feeling isolated from others	.99	.965	208
“Flashbacks” (sudden, vivid, distracting memories)	1.30	1.045	208
Restless sleep	1.19	1.008	208
Low sex drive	.91	1.043	208
Anxiety attacks	1.12	1.005	208
Sexual overactivity	.96	.994	208
Loneliness	1.20	.987	208
Nightmares	1.26	.964	208
“Spacing out” (going away in your mind)	1.22	.961	208
Sadness	1.49	.846	208
Dizziness	1.44	.931	208
Not feeling satisfied with your sex life	1.13	1.037	208
Trouble controlling your temper	1.31	.924	208
Waking up early in the morning	1.41	1.041	208
Uncontrollable crying	.73	.930	208
Fear of men	1.13	1.122	208
Not feeling rested in the morning	1.21	1.004	208
Having sex that you didn’t enjoy	1.05	1.039	208
Trouble getting along with others	1.00	.893	208
Memory problems	.84	1.011	208
Desire to physically hurt yourself	.54	.878	208
Fear of women	.92	1.060	208
Waking up in the middle of the night	1.34	1.008	208
Bad thoughts or feelings during sex	.96	1.018	208
Passing out	.79	.994	208
Feeling that things are “unreal”	1.10	1.033	208
Unnecessary or over-frequent washing	.87	1.017	208
Feelings of inferiority	.99	.973	208
Feeling tense all the time	.96	.942	208
Being confused about your sexual feelings	.94	1.025	208
Desire to physically hurt others	.60	.917	208
Feelings of guilt	1.07	.978	208
Feeling that you are not always in your body	.69	.944	208
Having trouble breathing	.87	.959	208
Sexual feelings when you shouldn’t have them	.91	.939	208

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Headaches	40.58	298.110	.216	.232	.896
Insomnia	41.20	288.829	.432	.431	.894
Weight loss (without dieting)	41.36	294.802	.268	.245	.896
Stomach problems	41.00	293.947	.298	.308	.896
Sexual problems	41.61	294.133	.310	.412	.895
Feeling isolated from others	41.35	288.450	.467	.452	.893
“Flashbacks” (sudden, vivid, distracting memories)	41.03	288.134	.436	.423	.894
Restless sleep	41.14	287.483	.474	.469	.893
Low sex drive	41.42	291.192	.349	.387	.895
Anxiety attacks	41.22	289.658	.410	.356	.894
Sexual overactivity	41.38	293.163	.310	.334	.895
Loneliness	41.13	289.109	.436	.376	.894
Nightmares	41.07	286.256	.537	.456	.892
“Spacing out” (going away in your mind)	41.12	286.557	.529	.450	.892
Sadness	40.84	292.472	.398	.355	.894
Dizziness	40.89	289.654	.448	.420	.893
Not feeling satisfied with your sex life	41.21	290.474	.372	.413	.895
Trouble controlling your temper	41.02	288.831	.478	.378	.893
Waking up early in the morning	40.92	287.100	.468	.372	.893
Uncontrollable crying	41.60	291.903	.376	.302	.894
Fear of men	41.21	289.701	.360	.376	.895
Not feeling rested in the morning	41.12	287.237	.484	.444	.893
Having sex that you didn’t enjoy	41.28	284.697	.540	.465	.892
Trouble getting along with others	41.34	288.263	.516	.469	.893
Memory problems	41.49	286.541	.501	.563	.893
Desire to physically hurt yourself	41.79	294.100	.327	.360	.895
Fear of women	41.41	289.509	.390	.377	.894
Waking up in the middle of the night	41.00	288.971	.429	.383	.894
Bad thoughts or feelings during sex	41.38	290.313	.385	.309	.894
Passing out	41.54	290.974	.376	.348	.894
Feeling that things are “unreal”	41.23	285.676	.514	.492	.892
Unnecessary or over-frequent washing	41.47	290.627	.376	.358	.894
Feelings of inferiority	41.34	287.878	.481	.457	.893
Feeling tense all the time	41.37	287.413	.514	.494	.892
Being confused about your sexual feelings	41.39	287.582	.463	.424	.893
Desire to physically hurt others	41.74	294.901	.285	.357	.896
Feelings of guilt	41.26	288.241	.467	.424	.893
Feeling that you are not always in your body	41.64	289.671	.440	.382	.894
Having trouble breathing	41.47	307.564	-.112	.213	.901
Sexual feelings when you shouldn’t have them	41.42	297.075	.209	.285	.897

Reliability

Scale: Trauma Check List 40

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.896	.896	40

Scale: Dissociation

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.694	.695	6

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
6.60	13.894	3.727	6

Item Statistics

	Mean	Std. Deviation	N
"Flashbacks" (sudden, vivid, distracting memories)	1.30	1.045	208
"Spacing out" (going away in your mind)	1.22	.961	208
Dizziness	1.44	.931	208
Memory problems	.84	1.011	208
Feeling that things are "unreal"	1.10	1.033	208
Feeling that you are not always in your body	.69	.944	208

Scale: Anxiety

Reliability Statistics

Cronbach's Alpha	N of Items
.546	9

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
10.38	16.855	4.105	9

Item Statistics

	Mean	Std. Deviation	N
Headaches	1.75	.800	208
Stomach problems	1.33	.963	208
Anxiety attacks	1.12	1.005	208
Dizziness	1.44	.931	208
Fear of men	1.13	1.122	208
Fear of women	.92	1.060	208
Unnecessary or over-frequent washing	.87	1.017	208
Feeling tense all the time	.96	.942	208
Having trouble breathing	.87	.959	208

Scale: Depression

Reliability Statistics

Cronbach's Alpha	N of Items
.651	9

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
9.25	19.928	4.464	9

Item Statistics

	Mean	Std. Deviation	N
Insomnia	1.13	1.011	208
Weight loss (without dieting)	.97	.973	208
Low sex drive	.91	1.043	208
Sadness	1.49	.846	208
Waking up early in the morning	1.41	1.041	208
Uncontrollable crying	.73	.930	208
Desire to physically hurt yourself	.54	.878	208
Feelings of inferiority	.99	.973	208
Feelings of guilt	1.07	.978	208

Scale: Sexual Abuse Trauma Index

Reliability Statistics

Cronbach's Alpha	N of Items
.638	7

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
7.31	16.003	4.000	7

Item Statistics

	Mean	Std. Deviation	N
Sexual problems	.72	.916	208
"Flashbacks" (sudden, vivid, distracting memories)	1.30	1.045	208
Nightmares	1.26	.964	208
Fear of men	1.13	1.122	208
Memory problems	.84	1.011	208
Bad thoughts or feelings during sex	.96	1.018	208
Feeling that things are "unreal"	1.10	1.033	208

Scale: Sleep disturbance

Reliability Statistics

Cronbach's Alpha	N of Items
.722	6

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
7.55	15.263	3.907	6

Item Statistics

	Mean	Std. Deviation	N
Insomnia	1.13	1.011	208
Restless sleep	1.19	1.008	208
Nightmares	1.26	.964	208
Waking up early in the morning	1.41	1.041	208
Not feeling rested in the morning	1.21	1.004	208
Waking up in the middle of the night	1.34	1.008	208

Scale: Sexual Problems

Reliability Statistics

Cronbach's Alpha	N of Items
.714	8

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
7.57	21.425	4.629	8

Item Statistics

	Mean	Std. Deviation	N
Sexual problems	.72	.916	208
Low sex drive	.91	1.043	208
Sexual overactivity	.96	.994	208
Not feeling satisfied with your sex life	1.13	1.037	208
Having sex that you didn't enjoy	1.05	1.039	208
Bad thoughts or feelings during sex	.96	1.018	208
Being confused about your sexual feelings	.94	1.025	208
Sexual feelings when you shouldn't have them	.91	.939	208

Frequencies

PTSD

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	87	41.8	41.8	41.8
	PTSD	121	58.2	58.2	100.0
	Total	208	100.0	100.0	

Crosstabs

Crosstab

			PTSD		
			Normal	PTSD	Total
Gender	Male	Count	50	73	123
		% within PTSD	57.5%	60.3%	59.1%
		% of Total	24.0%	35.1%	59.1%
	Female	Count	37	48	85
		% within PTSD	42.5%	39.7%	40.9%
		% of Total	17.8%	23.1%	40.9%
Total		Count	87	121	208
		% within PTSD	100.0%	100.0%	100.0%
		% of Total	41.8%	58.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.171[b]	1	.679		
Continuity Correction[a]	.073	1	.787		
Likelihood Ratio	.171	1	.679		
Fisher's Exact Test				.775	.393
Linear-by-Linear Association	.170	1	.680		
N of Valid Cases	208				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 35. 55.

Religious affiliation * PTSD

Crosstab

			PTSD		Total
			Normal	PTSD	
Religious affiliation	Christianity	Count	69	94	163
		% within PTSD	80.2%	83.2%	81.9%
		% of Total	34.7%	47.2%	81.9%
	Islam	Count	17	19	36
		% within PTSD	19.8%	16.8%	18.1%
		% of Total	8.5%	9.5%	18.1%
Total		Count	86	113	199
		% within PTSD	100.0%	100.0%	100.0%
		% of Total	43.2%	56.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.287[b]	1	.592		
Continuity Correction[a]	.123	1	.726		
Likelihood Ratio	.286	1	.593		
Fisher's Exact Test				.710	.361
Linear-by-Linear Association	.286	1	.593		
N of Valid Cases	199				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15. 56.

Marital status * PTSD

Crosstab

			PTSD		Total
			Normal	PTSD	
Marital status	Never married	Count	48	65	113
		% within PTSD	58.5%	57.0%	57.7%
		% of Total	24.5%	33.2%	57.7%
	Married	Count	33	42	75
		% within PTSD	40.2%	36.8%	38.3%
		% of Total	16.8%	21.4%	38.3%
	Divorced/separated	Count	1	4	5
		% within PTSD	1.2%	3.5%	2.6%
		% of Total	.5%	2.0%	2.6%
	Widowed	Count	0	2	2
		% within PTSD	.0%	1.8%	1.0%
		% of Total	.0%	1.0%	1.0%
	Cohabiting	Count	0	1	1
		% within PTSD	.0%	.9%	.5%
		% of Total	.0%	.5%	.5%
Total		Count	82	114	196
		% within PTSD	100.0%	100.0%	100.0%
		% of Total	41.8%	58.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.301[a]	4	.509
Likelihood Ratio	4.488	4	.344
Linear-by-Linear Association	1.110	1	.292
N of Valid Cases	196		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .42.

Level of education * PTSD

Crosstab

			PTSD		
			Normal	PTSD	Total
Level of education	Non formal	Count	7	5	12
		% within PTSD	9.2%	5.1%	6.9%
		% of Total	4.0%	2.9%	6.9%
	Primary school	Count	5	2	7
		% within PTSD	6.6%	2.0%	4.0%
		% of Total	2.9%	1.1%	4.0%
	Secondary	Count	23	24	47
		% within PTSD	30.3%	24.2%	26.9%
		% of Total	13.1%	13.7%	26.9%
	Tertiary	Count	41	68	109
		% within PTSD	53.9%	68.7%	62.3%
		% of Total	23.4%	38.9%	62.3%
Total		Count	76	99	175
		% within PTSD	100.0%	100.0%	100.0%
		% of Total	43.4%	56.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.399[a]	3	.145
Likelihood Ratio	5.411	3	.144
Linear-by-Linear Association	4.415	1	.036
N of Valid Cases	175		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 3.04.

Occupation * PTSD

Crosstab

			PTSD		
			Normal	PTSD	Total
Occupation	Professional	Count	42	55	97
		% within PTSD	54.5%	48.7%	51.1%
		% of Total	22.1%	28.9%	51.1%
	Non-professionals	Count	16	25	41
		% within PTSD	20.8%	22.1%	21.6%
		% of Total	8.4%	13.2%	21.6%
	Unemployed	Count	19	33	52
		% within PTSD	24.7%	29.2%	27.4%
		% of Total	10.0%	17.4%	27.4%
Total		Count	77	113	190
		% within PTSD	100.0%	100.0%	100.0%
		% of Total	40.5%	59.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.691[a]	2	.708
Likelihood Ratio	.693	2	.707
Linear-by-Linear Association	.677	1	.411
N of Valid Cases	190		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.62.

Monthly income * PTSD

Crosstab

			PTSD		
			Normal	PTSD	Total
Monthly income	No income	Count	25	24	49
		% within PTSD	33.8%	25.0%	28.8%
		% of Total	14.7%	14.1%	28.8%
	< N20,000	Count	8	19	27
		% within PTSD	10.8%	19.8%	15.9%
		% of Total	4.7%	11.2%	15.9%
	N20,000 - N50,000	Count	15	24	39
		% within PTSD	20.3%	25.0%	22.9%
		% of Total	8.8%	14.1%	22.9%
	> N50,000	Count	26	29	55
		% within PTSD	35.1%	30.2%	32.4%
		% of Total	15.3%	17.1%	32.4%
Total		Count	74	96	170
		% within PTSD	100.0%	100.0%	100.0%
		% of Total	43.5%	56.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.962[a]	3	.266
Likelihood Ratio	4.039	3	.257
Linear-by-Linear Association	.038	1	.846
N of Valid Cases	170		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.75.

Frequencies

Dissociation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	80	38.5	38.5	38.5
	Dissociation	128	61.5	61.5	100.0
	Total	208	100.0	100.0	

Anxiety

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	82	39.4	39.4	39.4
	Anxiety	126	60.6	60.6	100.0
	Total	208	100.0	100.0	

Depression

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	85	40.9	40.9	40.9
	Depression	123	59.1	59.1	100.0
	Total	208	100.0	100.0	

Sexual abuse trauma index

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	88	42.3	42.3	42.3
	Sexual Abuse Trauma	120	57.7	57.7	100.0
	Total	208	100.0	100.0	

Sleep disturbance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	77	37.0	37.0	37.0
	Sleep disturbance	131	63.0	63.0	100.0
	Total	208	100.0	100.0	

Sexual problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	84	40.4	40.4	40.4
	Sexual problems	124	59.6	59.6	100.0
	Total	208	100.0	100.0	

Chi-Square Test

Dissociation

	Observed N	Expected N	Residual
None	80	104.0	-24.0
Dissociation	128	104.0	24.0
Total	208		

Anxiety

	Observed N	Expected N	Residual
None	82	104.0	-22.0
Anxiety	126	104.0	22.0
Total	208		

Depression

	Observed N	Expected N	Residual
None	85	104.0	-19.0
Depression	123	104.0	19.0
Total	208		

Sexual abuse trauma index

	Observed N	Expected N	Residual
None	88	104.0	-16.0
Sexual Abuse Trauma	120	104.0	16.0
Total	208		

Sleep disturbance

	Observed N	Expected N	Residual
None	77	104.0	-27.0
Sleep disturbance	131	104.0	27.0
Total	208		

Sexual problems

	Observed N	Expected N	Residual
None	84	104.0	-20.0
Sexual problems	124	104.0	20.0
Total	208		

Test Statistics

	Dissociation	Anxiety	Depression	Sexual abuse trauma index	Sleep disturbance	Sexual problems
Chi-Square[a]	11.077	9.308	6.942	4.923	14.019	7.692
df	1	1	1	1	1	1
Asymp. Sig.	.001	.002	.008	.027	.000	.006

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 104.0.

APPENDIX C2 – Hypotheses Results

Baseline: One-way ANOVA

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Dissociation (Pre-test)	Control	12	13.08	3.450	.996	10.89	15.28	7	18
	Intervention	12	13.17	3.713	1.072	10.81	15.53	7	18
	Total	24	13.13	3.505	.716	11.64	14.61	7	18
Anxiety (Pre-test)	Control	12	15.58	4.122	1.190	12.96	18.20	10	23
	Intervention	12	17.67	5.314	1.534	14.29	21.04	6	24
	Total	24	16.63	4.771	.974	14.61	18.64	6	24
Depression (Pre-test)	Control	12	18.08	3.450	.996	15.89	20.28	13	25
	Intervention	12	18.58	3.088	.892	16.62	20.55	13	24
	Total	24	18.33	3.212	.656	16.98	19.69	13	25
SATI (Pre-test)	Control	12	13.75	3.841	1.109	11.31	16.19	9	20
	Intervention	12	14.17	3.298	.952	12.07	16.26	8	19
	Total	24	13.96	3.507	.716	12.48	15.44	8	20
Sleep disturbance (Pre-test)	Control	12	14.17	2.038	.588	12.87	15.46	10	17
	Intervention	12	13.83	2.480	.716	12.26	15.41	11	18
	Total	24	14.00	2.226	.454	13.06	14.94	10	18
Sexual problems (Pre-test)	Control	12	9.92	5.534	1.598	6.40	13.43	0	16
	Intervention	12	9.67	5.532	1.597	6.15	13.18	2	18
	Total	24	9.79	5.413	1.105	7.51	12.08	0	18
PTSD Score (Pre-test)	Control	12	72.17	13.204	3.812	63.78	80.56	58	104
	Intervention	12	75.50	14.145	4.083	66.51	84.49	50	100
	Total	24	73.83	13.490	2.754	68.14	79.53	50	104

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Dissociation (Pre-test)	Between Groups	.042	1	.042	.003	.955
	Within Groups	282.583	22	12.845		
	Total	282.625	23			
Anxiety (Pre-test)	Between Groups	26.042	1	26.042	1.151	.295
	Within Groups	497.583	22	22.617		
	Total	523.625	23			
Depression (Pre-test)	Between Groups	1.500	1	1.500	.140	.712
	Within Groups	235.833	22	10.720		
	Total	237.333	23			
SATI (Pre-test)	Between Groups	1.042	1	1.042	.081	.778
	Within Groups	281.917	22	12.814		
	Total	282.958	23			
Sleep disturbance (Pre-test)	Between Groups	.667	1	.667	.129	.722
	Within Groups	113.333	22	5.152		
	Total	114.000	23			
Sexual problems (Pre-test)	Between Groups	.375	1	.375	.012	.913
	Within Groups	673.583	22	30.617		
	Total	673.958	23			
PTSD Score (Pre-test)	Between Groups	66.667	1	66.667	.356	.557
	Within Groups	4118.667	22	187.212		
	Total	4185.333	23			

Hypothesis 1: One-way ANOVA

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Dissociation (Post-test)	Control	12	13.50	4.275	1.234	10.78	16.22	5	18
	Intervention	12	6.33	5.105	1.474	3.09	9.58	0	17
	Total	24	9.92	5.882	1.201	7.43	12.40	0	18
Anxiety (Post-test)	Control	12	18.42	6.529	1.885	14.27	22.57	10	26
	Intervention	12	7.58	6.557	1.893	3.42	11.75	1	23
	Total	24	13.00	8.460	1.727	9.43	16.57	1	26
Depression (Post-test)	Control	12	18.42	6.868	1.983	14.05	22.78	5	26
	Intervention	12	7.92	7.716	2.227	3.01	12.82	1	26
	Total	24	13.17	8.933	1.823	9.39	16.94	1	26
SATI (Post-test)	Control	12	14.25	4.003	1.156	11.71	16.79	8	19
	Intervention	12	6.33	5.466	1.578	2.86	9.81	0	18
	Total	24	10.29	6.189	1.263	7.68	12.91	0	19
Sleep disturbance (Post-test)	Control	12	14.92	2.999	.866	13.01	16.82	11	18
	Intervention	12	6.58	4.738	1.368	3.57	9.59	2	16
	Total	24	10.75	5.758	1.175	8.32	13.18	2	18
Sexual problems (Post-test)	Control	12	9.08	5.961	1.721	5.30	12.87	0	19
	Intervention	12	3.33	5.742	1.658	-.31	6.98	0	19
	Total	24	6.21	6.433	1.313	3.49	8.92	0	19
PTSD Score (Post-test)	Control	12	74.50	25.589	7.387	58.24	90.76	44	106
	Intervention	12	31.25	28.496	8.226	13.14	49.36	7	103
	Total	24	52.88	34.489	7.040	38.31	67.44	7	106

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Dissociation (Post-test)	Between Groups	308.167	1	308.167	13.902	.001
	Within Groups	487.667	22	22.167		
	Total	795.833	23			
Anxiety (Post-test)	Between Groups	704.167	1	704.167	16.448	.001
	Within Groups	941.833	22	42.811		
	Total	1646.000	23			
Depression (Post-test)	Between Groups	661.500	1	661.500	12.398	.002
	Within Groups	1173.833	22	53.356		
	Total	1835.333	23			
SATI (Post-test)	Between Groups	376.042	1	376.042	16.385	.001
	Within Groups	504.917	22	22.951		
	Total	880.958	23			
Sleep disturbance (Post-test)	Between Groups	416.667	1	416.667	26.506	.000
	Within Groups	345.833	22	15.720		
	Total	762.500	23			
Sexual problems (Post-test)	Between Groups	198.375	1	198.375	5.791	.025
	Within Groups	753.583	22	34.254		
	Total	951.958	23			
PTSD Score (Post-test)	Between Groups	11223.375	1	11223.375	15.303	.001
	Within Groups	16135.250	22	733.420		
	Total	27358.625	23			

Hypothesis 2: One-way ANOVA

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Dissociation (Post-test)	Male	4	9.50	5.447	2.723	.83	18.17	5	17
	Female	8	4.75	4.432	1.567	1.04	8.46	0	13
	Total	12	6.33	5.105	1.474	3.09	9.58	0	17
Anxiety (Post-test)	Male	4	12.00	8.756	4.378	-1.93	25.93	4	23
	Female	8	5.38	4.241	1.499	1.83	8.92	1	13
	Total	12	7.58	6.557	1.893	3.42	11.75	1	23
Depression (Post-test)	Male	4	12.00	10.100	5.050	-4.07	28.07	2	26
	Female	8	5.88	5.963	2.108	.89	10.86	1	19
	Total	12	7.92	7.716	2.227	3.01	12.82	1	26
SATI (Post-test)	Male	4	10.50	5.972	2.986	1.00	20.00	4	18
	Female	8	4.25	4.097	1.449	.82	7.68	0	12
	Total	12	6.33	5.466	1.578	2.86	9.81	0	18
Sleep disturbance (Post-test)	Male	4	7.50	6.137	3.069	-2.27	17.27	3	16
	Female	8	6.13	4.291	1.517	2.54	9.71	2	14
	Total	12	6.58	4.738	1.368	3.57	9.59	2	16
Sexual problems (Post-test)	Male	4	6.50	8.583	4.291	-7.16	20.16	0	19
	Female	8	1.75	3.412	1.206	-1.10	4.60	0	10
	Total	12	3.33	5.742	1.658	-.31	6.98	0	19
PTSD Score (Post-test)	Male	4	47.25	38.543	19.272	-14.08	108.58	16	103
	Female	8	23.25	20.492	7.245	6.12	40.38	7	67
	Total	12	31.25	28.496	8.226	13.14	49.36	7	103

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Dissociation (Post-test)	Between Groups	60.167	1	60.167	2.656	.134
	Within Groups	226.500	10	22.650		
	Total	286.667	11			
Anxiety (Post-test)	Between Groups	117.042	1	117.042	3.289	.100
	Within Groups	355.875	10	35.588		
	Total	472.917	11			
Depression (Post-test)	Between Groups	100.042	1	100.042	1.803	.209
	Within Groups	554.875	10	55.488		
	Total	654.917	11			
SATI (Post-test)	Between Groups	104.167	1	104.167	4.640	.057
	Within Groups	224.500	10	22.450		
	Total	328.667	11			
Sleep disturbance (Post-test)	Between Groups	5.042	1	5.042	.208	.658
	Within Groups	241.875	10	24.188		
	Total	246.917	11			
Sexual problems (Post-test)	Between Groups	60.167	1	60.167	1.989	.189
	Within Groups	302.500	10	30.250		
	Total	362.667	11			
PTSD Score (Post-test)	Between Groups	1536.000	1	1536.000	2.077	.180
	Within Groups	7396.250	10	739.625		
	Total	8932.250	11			

Hypothesis 3: One-way ANOVA

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Dissociation (Post-test)	Younger (19-35 years)	8	4.50	2.619	.926	2.31	6.69	2	10
	Older (36-75 years)	4	10.00	7.257	3.629	-1.55	21.55	0	17
	Total	12	6.33	5.105	1.474	3.09	9.58	0	17
Anxiety (Post-test)	Younger (19-35 years)	8	5.25	4.773	1.688	1.26	9.24	1	15
	Older (36-75 years)	4	12.25	7.805	3.902	-.17	24.67	6	23
	Total	12	7.58	6.557	1.893	3.42	11.75	1	23
Depression (Post-test)	Younger (19-35 years)	8	4.25	3.694	1.306	1.16	7.34	1	11
	Older (36-75 years)	4	15.25	8.884	4.442	1.11	29.39	7	26
	Total	12	7.92	7.716	2.227	3.01	12.82	1	26
SATI (Post-test)	Younger (19-35 years)	8	4.75	3.732	1.319	1.63	7.87	2	12
	Older (36-75 years)	4	9.50	7.550	3.775	-2.51	21.51	0	18
	Total	12	6.33	5.466	1.578	2.86	9.81	0	18
Sleep disturbance (Post-test)	Younger (19-35 years)	8	5.00	3.162	1.118	2.36	7.64	2	10
	Older (36-75 years)	4	9.75	6.238	3.119	-.18	19.68	3	16
	Total	12	6.58	4.738	1.368	3.57	9.59	2	16
Sexual problems (Post-test)	Younger (19-35 years)	8	.88	1.727	.611	-.57	2.32	0	5
	Older (36-75 years)	4	8.25	8.098	4.049	-4.64	21.14	2	19
	Total	12	3.33	5.742	1.658	-.31	6.98	0	19
PTSD Score (Post-test)	Younger (19-35 years)	8	18.88	13.293	4.700	7.76	29.99	7	41
	Older (36-75 years)	4	56.00	36.606	18.303	-2.25	114.25	25	103
	Total	12	31.25	28.496	8.226	13.14	49.36	7	103

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Dissociation (Post-test)	Between Groups	80.667	1	80.667	3.916	.076
	Within Groups	206.000	10	20.600		
	Total	286.667	11			
Anxiety (Post-test)	Between Groups	130.667	1	130.667	3.818	.079
	Within Groups	342.250	10	34.225		
	Total	472.917	11			
Depression (Post-test)	Between Groups	322.667	1	322.667	9.712	.011
	Within Groups	332.250	10	33.225		
	Total	654.917	11			
SATI (Post-test)	Between Groups	60.167	1	60.167	2.241	.165
	Within Groups	268.500	10	26.850		
	Total	328.667	11			
Sleep disturbance (Post-test)	Between Groups	60.167	1	60.167	3.222	.103
	Within Groups	186.750	10	18.675		
	Total	246.917	11			
Sexual problems (Post-test)	Between Groups	145.042	1	145.042	6.665	.027
	Within Groups	217.625	10	21.763		
	Total	362.667	11			
PTSD Score (Post-test)	Between Groups	3675.375	1	3675.375	6.992	.025
	Within Groups	5256.875	10	525.688		
	Total	8932.250	11			

Hypothesis 4: One-way ANOVA

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Dissociation (Post-test)	No formal education	6	6.83	4.956	2.023	1.63	12.03	0	13
	Completed primary school	5	6.60	5.983	2.676	-.83	14.03	2	17
	Completed secondary school	1	2.00	.	.	.	.	2	2
	Total	12	6.33	5.105	1.474	3.09	9.58	0	17
Anxiety (Post-test)	No formal education	6	7.17	3.764	1.537	3.22	11.12	3	13
	Completed primary school	5	9.20	9.445	4.224	-2.53	20.93	1	23
	Completed secondary school	1	2.00	.	.	.	.	2	2
	Total	12	7.58	6.557	1.893	3.42	11.75	1	23
Depression (Post-test)	No formal education	6	8.17	6.080	2.482	1.79	14.55	2	19
	Completed primary school	5	8.80	10.378	4.641	-4.09	21.69	1	26
	Completed secondary school	1	2.00	.	.	.	.	2	2
	Total	12	7.92	7.716	2.227	3.01	12.82	1	26
SATI (Post-test)	No formal education	6	5.83	4.579	1.869	1.03	10.64	0	12
	Completed primary school	5	7.80	6.943	3.105	-.82	16.42	2	18
	Completed secondary school	1	2.00	.	.	.	.	2	2
	Total	12	6.33	5.466	1.578	2.86	9.81	0	18
Sleep disturbance (Post-test)	No formal education	6	6.33	4.761	1.944	1.34	11.33	2	14
	Completed primary school	5	7.80	5.119	2.289	1.44	14.16	2	16
	Completed secondary school	1	2.00	.	.	.	.	2	2
	Total	12	6.58	4.738	1.368	3.57	9.59	2	16
Sexual problems (Post-test)	No formal education	6	2.33	3.882	1.585	-1.74	6.41	0	10
	Completed primary school	5	5.20	7.950	3.555	-4.67	15.07	0	19
	Completed secondary school	1	.00	.	.	.	.	0	0
	Total	12	3.33	5.742	1.658	-.31	6.98	0	19
PTSD Score (Post-test)	No formal education	6	31.17	20.124	8.216	10.05	52.29	11	67
	Completed primary school	5	36.20	39.360	17.602	-12.67	85.07	11	103
	Completed secondary school	1	7.00	.	.	.	.	7	7
	Total	12	31.25	28.496	8.226	13.14	49.36	7	103

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Dissociation (Post-test)	Between Groups	20.633	2	10.317	.349	.715
	Within Groups	266.033	9	29.559		
	Total	286.667	11			
Anxiety (Post-test)	Between Groups	45.283	2	22.642	.477	.636
	Within Groups	427.633	9	47.515		
	Total	472.917	11			
Depression (Post-test)	Between Groups	39.283	2	19.642	.287	.757
	Within Groups	615.633	9	68.404		
	Total	654.917	11			
SATI (Post-test)	Between Groups	31.033	2	15.517	.469	.640
	Within Groups	297.633	9	33.070		
	Total	328.667	11			
Sleep disturbance (Post-test)	Between Groups	28.783	2	14.392	.594	.572
	Within Groups	218.133	9	24.237		
	Total	246.917	11			
Sexual problems (Post-test)	Between Groups	34.533	2	17.267	.474	.637
	Within Groups	328.133	9	36.459		
	Total	362.667	11			
PTSD Score (Post-test)	Between Groups	710.617	2	355.308	.389	.689
	Within Groups	8221.633	9	913.515		
	Total	8932.250	11			