

**ASSESSMENT OF EFFECTIVENESS OF NARRATIVE EXPOSURE THERAPY
INTERVENTION IN THE MANAGEMENT OF TRAUMATIC STRESS AMONG
YOUNG PEOPLE IN KAKUMA DIVISION, TURKANA COUNTY**

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**A Thesis Submitted in Partial Fulfilment of the Requirements for the Award of the
Degree of Master of Arts in Counselling Psychology, Department of Counselling
Psychology, School of Humanities and Social Sciences of Africa Nazarene University**

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DECLARATION

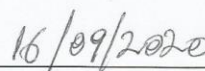
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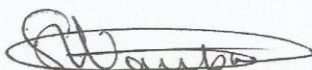
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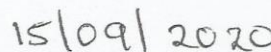
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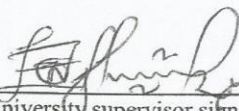


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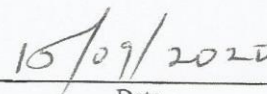


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DEDICATION

To my biological family

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TABLE OF CONTENTS

DECLARATION	Error! Bookmark not defined.
DEDICATION	ii
ACKNOWLEDGEMENTS.....	iv
TABLE OF CONTENTS	v
LIST OF TABLES.....	x
LIST OF FIGURES.....	xii
ABSTRACT	xiii
DEFINITION OF TERMS.....	xiv
ABBREVIATIONS AND ACRONYMS.....	xviii
CHAPTER ONE.....	1
INTRODUCTION	1
1.1 Introduction	1
1.2 Background of the Study.....	1
1.3 Statement of the Problem	4
1.4 Purpose of the Study	6
1.5 Objectives of the Study	6
1.6 Research Hypotheses	7
1.7 Significance of the Study	7
1.8 Scope of the Study	8
1.9 Delimitations of the Study	9
1.10 Limitations of the Study.....	9
1.11 Assumptions of the Study	10

1.12 Theoretical Framework.....	10
1.13 Conceptual Framework.....	15
CHAPTER TWO.....	17
LITERATURE REVIEW.....	17
2.1 Introduction	17
2.2 Review of Literature	17
2.2.1 Narrative Exposure Therapy Intervention and Management of Memory Intrusion Symptoms	18
2.2.2 Narrative Exposure Therapy Intervention and Management of Avoidance of Stimuli Symptoms.....	21
2.2.3 Narrative Exposure Therapy Intervention in Management of Negative Alterations in Cognitions and Mood Symptoms	23
2.2.4 Narrative Exposure Therapy Intervention in Management of Alterations in Arousal and Reactivity to External Stimuli Symptoms	25
2.3 Summary of Review of Literature and Research Gaps.....	27
CHAPTER THREE.....	29
RESEARCH METHODOLOGY	29
3.1 Introduction	29
3.2 Research Design	29
3.3 Research Site	30
3.4 Target Population	31
3.5 Sampling Procedures and Sample Size.....	31
3.6 Data Collection.....	32

3.6.1 Data Collection Instrument.....	32
3.6.2 Piloting.....	33
3.6.3 Instrument Reliability.....	33
3.6.4 Instrument Validity.....	34
3.6.5 Data Collection Procedures	35
3.7 Data Processing and Analysis	36
3.8 Legal and Ethical Considerations	36
CHAPTER FOUR	39
DATA ANALYSIS AND FINDINGS.....	39
4.1 Introduction	39
4.2 Response Rates of the Study	39
4.3 Respondents' Demographic Characteristics.....	40
4.3.1 Age of Respondents.....	40
4.3.2 Gender of Respondents.....	41
4.3.3 Frequency of Respondents' Nationality	42
4.3.4 Respondents' Religious Affiliation.....	43
4.3.5 Respondents who had Received Counselling Previously	44
4.3.6 Respondents who needed Further Counselling Services.....	46
4.4 Pre-test and Post-test Results of the Study Objectives.	47
4.4.1 Effectiveness of Narrative Exposure Therapy Intervention and Management of Memory Intrusion Symptoms.....	47
4.4.2 Effectiveness of Narrative Exposure Therapy Intervention and Management of Avoidance of Stimuli Symptoms.....	51

4.4.3 Effectiveness of Narrative Exposure Therapy Intervention in Management of Negative Alterations in Cognitions and Mood Symptoms.....	54
4.4.4 Effectiveness of Narrative Exposure Therapy Intervention in Management of Alterations in Arousal and Reactivity to External Stimuli Symptoms	57
CHAPTER FIVE	61
DISCUSSIONS, CONCLUSIONS AND RECOMENDATIONS	61
5.1 Introduction	61
5.2 Discussions.....	61
5.2.1 Narrative Exposure Therapy Intervention and Management of Memory Intrusion Symptoms	63
5.2.2 Narrative Exposure Therapy Intervention and Management of Avoidance of Stimuli Symptoms.....	66
5.2.3 Narrative Exposure Therapy Intervention in Management of Negative Alterations in Cognitions and Mood Symptoms	68
5.2.4 Narrative Exposure Therapy Intervention in Management of Alterations in Arousal and Reactivity to External Stimuli Symptoms	72
5.3 Summary of Main Findings.....	75
5.4 Conclusion.....	76
5.5 Recommendations.....	77
5.6 Areas of Further Research.....	77
REFERENCES	79
APPENDICES	90

Appendix 1: Research Instrument: PTSD Checklist for DSM-5 (PCL-5) with LEC-5	90
Appendix 2: Narrative Exposure Therapy Procedures.....	96
Appendix 3: Letter of Introduction from ANU’s DVC	100
Appendix 4: Research Permit from NACOSTI.....	101
Appendix 5: Refugee Affairs Secretariat’s (RAS) Permit.....	103
Appendix 6: Data Collection Photos.....	104
Appendix 7: Map of Turkana County indicating Kakuma Division.....	105

LIST OF TABLES

Table 3.1: Sample Size of the Study.....	32
Table 3.2: Summary of Data Analysis Methods	38
Table 4.3: Response Rates of Participants	40
Table 4.4: Frequency of Respondents' Nationality	43
Table 4.5: Pre-test Group Statistics of Memory Intrusion Symptoms.....	48
Table 4.6: Pre-test Independent Samples T-test Scores of Memory Intrusion Symptoms	49
Table 4.7: Post-test Group Statistics of Memory Intrusion Symptoms	50
Table 4.8: Post-test Independent Samples T-test Scores of Memory Intrusion Symptoms	50
Table 4.9: Pre-test Group Statistics of Avoidance of Stimuli Symptoms	51
Table 4.10: Pre-test Independent Samples T-test Scores of Avoidance of Stimuli Symptoms	52
Table 4.11: Post-test Group Statistics of Avoidance of Stimuli Symptoms	53
Table 4.12: Post-test Independent Samples T-test Scores of Avoidance of Stimuli Symptoms	53
Table 4.13: Pre-test Group Statistics of Negative Alterations in Cognitions and Mood Symptoms	54
Table 4.14: Pre-test Independent Samples T-test Scores of Negative Alteration in Cognitions and Mood Symptoms.....	55

Table 4.15: Post-test Group Statistics of Negative Alterations in Cognitions and Mood Symptoms	56
Table 4.16: Post-test Independent Samples T-test Scores of Negative Alterations in Cognitions and Mood Symptoms	56
Table 4.17: Pre-test Group Statistics of Alterations in Arousal and Reactivity to External Stimuli Symptoms	58
Table 4.18: Pre-test Independent Samples T-test Scores of Alterations in Arousal and Reactivity to External Stimuli Symptoms	58
Table 4.19: Post-Test Group Statistics of Alterations in Arousal and Reactivity to External Stimuli Symptoms	59
Table 4.20: Post-test Independent Samples T-test Scores of Alterations in Arousal and Reactivity to External Stimuli Symptom	60

LIST OF FIGURES

Figure 1.1: Conceptual Framework of Narrative Exposure Therapy Intervention and Management of Traumatic Stress.....	15
Figure 4. 2: Age of Respondents	41
Figure 4.3: Gender of Respondents	42
Figure 4.4: Respondents' Religious Affiliation	44
Figure 4.5: Respondents who had Received Counselling Previously	45
Figure 4.6: Respondents who needed Further Counselling Services	46

ABSTRACT

Studies have shown that individuals who experience traumatic stress are vulnerable to developing psychological disorders than any other population. Kakuma refugee camp is currently the home of 196,666 people who fled from their various countries due to civil war and organized violence. Young people form 20% of Kakuma refugee camp population. These individuals live with constant reminders of negative memories of their traumatic war experience. Their mental health worsens when effective evidence based trauma-focused interventions are not provided. Against this background, this study sought to assess the young people's traumatic stress with the use of post-traumatic stress disorder checklist for DSM-5 (PCL-5) tool. The study adopted narrative exposure therapy framework and intervention for traumatic stress management. The study objectives were; to assess the effectiveness of narrative exposure therapy in management of memory intrusion symptoms, avoidance of stimuli symptoms, alterations in cognitions and mood symptoms and alterations in arousal and reactivity to external stimuli symptoms of traumatic stress. The study used quasi-experimental research design whereby the researcher adopted a non-equivalent groups design. This design involved one treatment group and one control group. The target population comprised of registered youth in Kakuma refugee camp who are 39,960 in number. The study sampled 104 participants through multistage cluster and proportionate sampling. While the treatment group received narrative exposure therapy intervention, the control group received normal counselling intervention. Descriptive and inferential statistics were used to analyse the data with the aid of statistical programme for social sciences (SPSS) version 23. Independent sample t-test was used to list the statistical significant differences between the means in the pre-test and post-test scores for the groups. From the results, memory intrusion symptoms were higher among young people who were exposed to normal counselling. The mean difference was -0.870 (95% CI = -1.156 to -0.585), $t(102) = -6.045$, $p < 0.000$. , avoidance of stimuli symptoms were higher among young people exposed to normal counselling. The mean difference was -0.496 (95% CI = -0.881 to -0.110), $t(102) = -2.550$, $p = 0.12 < 0.05$. In addition, negative alterations in cognitions and mood symptoms were higher among young people who were exposed to normal counselling. The mean difference was -1.306 (95% CI = -1.559 to -1.052), $t(102) = -10.224$, $p = < 0.00$, and alterations in arousal and reactivity to external stimuli symptoms were higher among young people who were exposed to normal counselling. The mean difference was -0.726 (95% CI = -0.968 to -0.484), $t(102) = -5.953$, $p = < 0.00$. The researcher established that narrative exposure therapy intervention is effective in the management of traumatic stress among young people in Kakuma division. The findings of this study were recommended as useful to counsellors, psychologists and other mental health practitioners working among refugees and traumatized populations in evidence based trauma counselling. Counselling students and counsellor trainers would refer to the study findings for guidance in their research work, counselling practice and training.

DEFINITION OF TERMS

The following are the operational definitions of terms used in this study.

Cold Memories: This refers to memories of life events that are not distressing for an individual when narrated. “Cold” Memories are also called Verbally Accessible Memory (VAM). They include knowledge about life-time periods and specific events. Narrative Exposure Therapy Intervention (NET) seeks to integrate “Hot” memories with “Cold” memories.

Control Group: This refers to participants who were initially screened with PCL-5 but were not subjected to NET treatment but counselled using normal counselling intervention.

Counselling: This is a talking therapy that involves the application of theories and skills to resolve life challenging issues. It is used interchangeably with therapy. In this study NET intervention was used to counsel clients with traumatic stress symptoms in experimental group.

Effectiveness: Refers to the degree of success of Narrative Exposure Therapy Intervention (NET). The researcher tested the treatment of NET against the hypotheses after intervention to ascertain its effectiveness.

Experimental Group: Refers to randomly selected participants from the sample population after the initial screening (pretest) and were counselled using Narrative Exposure Therapy Intervention.

- Habituation:** This refers to the decline in reactivity to environmental stimuli due to repeated exposure leading to a natural decrease in the level of traumatic stress. In this study it is the final stage and general outcome of Narrative Exposure Therapy Intervention.
- Hot Memories:** Hot memories are also called Situationally Accessible Memories (SAM). It refers to fragmented traumatic memories that have lost their connection to the context of the original experience. They are easily triggered with a sensory or environmental cue, activating a physiological fear response. (Brewin, Dalgleish & Joseph, 1996). “Hot” memories are the target in Narrative Exposure Therapy Intervention.
- Independent Sample t-Test:** This is a statistical test used in comparing the means of two independent groups or two intervention. In this study, it is use to test the means of the experimental group and the control group to determine the statistical significant effectiveness.
- Intervention:** Refers to a treatment undertaken to manage, or alter the course of the neurotic process of a disease or disorder. In this study it refers to the procedures used by Narrative Exposure Therapy for traumatic stress management.
- Lifeline Approach:** Refers to a chronological narration aimed at creating a coherent, comprehensive and integrated life story. In this study, it is the starting session in Narrative Exposure Therapy Intervention.

Management: Refers to the act of getting things done to achieve a goal or being in control of a given situation. In this study it refers to the act of preventing, minimizing or healing the effects of traumatic stress to improve quality of life through the application of Narrative Exposure therapy Intervention.

Narrative Exposure Therapy (NET): This is an exposure intervention that encourages individual with traumatic stress symptoms 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.

Normal Counselling Intervention: This refers to unstructured counselling approach anybody can give. This was given to the control group since they cannot be left unattended to, while the treatment group received Narrative Exposure Therapy Intervention.

Refugees: This refers to people who have crossed an international border to seek safety in another country as a result of war and oppression in their home country. It was used in this study to refer to those living in Kakuma refugee camp.

Trauma Counselling: Refers to trauma-focused intervention offered to clients who have been traumatized. In this study clients received Narrative Exposure Therapy Intervention as trauma counselling.

Traumatic Events: Refer to those human or non-human activities that are outside the range of normal daily human experiences characterized by high level of distress. It is presumed that those in Kakuma have experienced one or more traumatic events leading to traumatic stress. Life events checklist for DSM-5 (LEC-5) was used to help respondents remember the traumatic events they have experienced.

Traumatic Stress: This is a psychosomatic response to an overwhelming life threatening experiences that are emotionally painful, intense, and distressing. In this study, it was used interchangeably with Post-Traumatic Stress Disorder (PTSD).

Young People: Refers to persons between the ages of 15-24 (United Nations General Assembly, June, 1981). In this study the term was used interchangeably to mean the youth within the above age bracket and those in Form Three who took part in the study.

ABBREVIATIONS AND ACRONYMS

APA.	American Psychiatric Association
APA.	American Psychological Association
CBT.	Cognitive Behavior Therapy
CIDI	Composite International Diagnostic Interview
DRT.	Dual Representation Theory
DSM- 5.	Diagnostic Statistical Manual of Mental Disorders, Fifth Edition
IDP.	Internally Displaced Persons
LEC-5	Life Events Checklist for DSM-5
MRP	Mantram Repetition Programme
NACOSTI	National Commission for Science, Technology and Innovation
NET	Narrative Exposure Therapy
PCL-5.	PTSD Checklist for DSM-5
PDT.	Psychodynamic Therapy
PTSD.	Post- Traumatic Stress Disorder
RCT.	Randomized Controlled Trial
SAM	Situationally Accessible Memories
SPSS.	Statistical Package for Social Sciences
TF-CBT.	Trauma-Focused Cognitive Behaviour Therapy
UNHCR.	United Nations High Commissioner for Refugees
VAM	Verbally Accessible Memories
W.H.O	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter presents the background of the study, statement of the problem, purpose of study, research objectives, research hypotheses, and significance of the study. It also includes limitations of the study, delimitations of the study, assumptions of the study, theoretical framework and conceptual framework.

1.2 Background of the Study

Trauma as described by Van Rooyen and Nqweni (2012), is any life threatening experience that amounts to excessive fear and other psychosomatic reactions that impedes an individual functioning systems. Traumatic stress is a resultant effect of traumatic experience which is diagnosed through assessment of symptoms often manifested after experiencing or witnessing a traumatic event (Hull & Corrigan, 2019). Symptoms of traumatic stress are manifested in form of long-lasting psychological distress, from mild anxiety to symptoms that interfere with almost all aspects of individual functioning (Briere & Scott, 2015). This psychological distress affects an individual in four domain symptom clusters, namely; memory intrusion, avoidance of stimuli, changes in thoughts and mood and hyper-arousal/ hyper-vigilance (Dimauro, Carter, Folk & Kashdan, 2014).

A research by Burri and Maercker, (2014) assessing the rates of traumatic stress in some European countries showed the following statistics; Croatia 6.67%, Netherland 3.30%, UK 3%, France 2.32% and Germany 2.31%. Within the US military officials who serve in Iraq and Afghanistan, 11% to 20% is believed to live with symptoms of traumatic

stress (Ghaffarzadegan, Ebrahimvandi, & Jalali, 2016). Also, another study among secondary school students that sampled 403 between the ages of 16-19 years in Bagdad. The outcome of the study showed 84% respondents living with at least one traumatic event. Further analysis indicated that 61% of the respondents fully endorsed post-traumatic stress symptoms criteria (Al-Hadethe, Hunt, Thomas & Al-Qaysi, 2014).

Furthermore, a research conducted by Sheikh et al. (2014), sampled 258 among internally displaced persons (IDPs). The study investigated psychological distress symptoms and coping in Kaduna, North-western Nigeria. 42.2% among the internally displaced persons (IDPs) had fully diagnosed symptoms of traumatic stress. The most common distress felt by the respondents were destruction of individual property (96.1%), evacuation from home community (96%) and experiencing of victimization and violence (88%). Overall, 58% recorded up to 11-15 traumatic events. The study suggested that some evidence trauma-based interventions could contribute to reducing psychological distress and traumatic reactions felt among the IDPs.

In a similar way, following post-election violence (PEV) of 2007/8 in Kenya, Musau, Munene and Khasakhala (2017) conducted a baseline researched on the types and forms of traumatic events survivors were exposed to. A sample of 139 respondents from purposive sampling revealed among others the following findings from the internally displaced persons (IDPS); 88% forceful relocated, 67% lost properties, 4% experienced rape and sexual assault, 21.6% lost significant others, 11% witnessed rape, while 9.3% experienced traumatic grief. Based on the findings, the study concluded that trained psychological service personnel could have been provided to handle the aftermath of human conflicts appropriately enough to avert human suffering. Similarly, another study

was carried out by Harder, Mutiso, Khasakhala, Buke and Ndeti (2012) on the multiple traumas, Post-election violence, and post-traumatic stress among impoverished Kenyan youth in Kenya. The study sampled 552 youth from impoverished informal settlements. The result indicated that 47% of them had more than five traumatic events.

In the same vein, a study assessing post-traumatic stress symptoms together with anxiety and depression among adolescents who have been neglected and abused aged 13-18 in charitable institution for children was conducted by Nyagwencha, Munene, James, Mewes and Barke (2018). Of the 232 sample, anxiety disorder prevalence was 84.1%, depression showed 50.4% PTSD and traumatic stress prevalence was 21.6%. These studies show that traumatized population remains a vulnerable group and psychological interventions adapted to the need of traumatized population need to be competence based and sufficiently qualitative to address psychological symptoms.

Kakuma refugee camp currently holds a populations of 196,666 people who have experienced one traumatic event or the other. 20% of this population are young people aged 15-24 (UNHCR, 2020). These young people are basically those who fled their own countries due to traumatic events of civil war and organized violence (Sanghi, Onder & Vemuru, 2016). Consequently, they are at risk of developing psychological disturbances (Kelley, Weathers, Mason & Pruneau, 2012). They are equally vulnerable to mental health challenges particularly post-traumatic stress disorder (PTSD) if proper trauma-based, psychological and social supports services are not made available (Spitzer, Vogel, Barnow, Freyberger & Grabe, 2007; Koenen, Stellman, Sommer & Stellman, 2008). The United Nations posit that refugees are at increased risk for developing mental health problems due to a range of risk factors including experiences of violence and upheaval in their home and

in refugees' settlements (UNHCR, 2015; Silove, Ventevogel & Rees, 2017). It is against this backdrop that this study sought to examine the effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma division.

Narrative Exposure Therapy (NET) is a trauma-focused psychological treatment designed to address symptoms of traumatic stress among populations who have been exposed to multiple traumas and survivors of traumatic events. (Schauer, Neuner & Elbert, 2011). Individuals who have experienced trauma often manifest symptoms of fragmentation of memory, disorientation, dissociation and other symptoms (Herman, 2015). In trying to avoid reactivation of traumatic memories and fear of being back to the traumatic scene, survivors find it difficult to narrate their experience in a coherent and meaningful manner (Neuner, 2012). Sometimes the disconnection in memory presentation distress is not intentional but owing to dissociative amnesia (Gold & Cook, 2017). NET aims at enabling trauma survivors to recall and narrate their traumatization for the purpose of healing and integration. The emphasis on time and place of the event is maintained while at the same time re-experiencing the emotions until habituation is achieved. It was against this background that the researcher sought to assess the effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma Division.

1.3 Statement of the Problem

Following civil war and organized violence, refugees were displaced from their homes and disposed of their properties. Those who survived fled their home countries to seek refuge in different places of which Kakuma refugee camp is one of them.

Consequently, these individuals are known as refugees. Studies have shown that not less than 15-20 percent of refugees suffer traumatization and live with mental health challenges and about four percent of this population has serious disorders in need of psychiatry and mental health professional interventions. Kakuma refugees suffer pains caused by losses of their loved ones, properties, source of their livelihood among others. They equally suffer psychological pains caused by physical separation from their familiar environment and from their loved ones. Kakuma refugees also have challenges of decent living environment, inadequate supply of water and food, restriction of movement, financial and economic challenges. Quality education is also another major challenge to Kakuma youth due to insufficient education facilities and insecure learning environment.

These daily stressors increase their stress level leading to prolonged feeling of sadness, depression significant fear, helplessness, dissociation, confusion, disempowerment, disconnection, personal insecurity, pessimistic view of life, and other disruptive feelings that affect their functioning abilities. With these traumatic stress symptoms, they are prone to causing harm to themselves and to others. Interventions for management need to be holistic addressing the different domains of psychological distress symptoms. The effects of untreated symptoms of traumatic stress among young people in Kakuma could amount to survivors living with mental and psychological health challenges and disorders all through their life. It could equally lead to increased number of maladjusted youths in the society with tendencies for crime and violence. Refugees find it difficult to talk about their life in a coherent and logical manner due to disconnection and disorientation as a result of untreated traumatic experience. Availability of mental health professional to refugees' population to help them address their traumatic experience is a

challenge. It was against this background the researcher sought to assess the effectiveness of narrative exposure therapy in the management of traumatic stress among young people living in Kakuma Division.

1.4 Purpose of the Study

The purpose of this study was to establish the effectiveness of Narrative Exposure Therapy Intervention in the management of traumatic stress among young people in Kakuma division, Turkana County in Kenya.

1.5 Objectives of the Study

The study was guided by the following objectives;

1. To determine the effectiveness of Narrative Exposure Therapy Intervention in management of memory intrusion symptoms of traumatic stress among young people in Kakuma Division.
2. To establish the effectiveness of Narrative Exposure Therapy Intervention in management of avoidance of stimuli symptoms of traumatic stress among young people in Kakuma Division.
3. To assess the effectiveness of Narrative Exposure Therapy Intervention in management of negative alterations in cognitions and mood of traumatic stress occurred among young people in Kakuma Division.
4. To examine the effectiveness of Narrative Exposure Therapy Intervention in Management of alterations in arousal and reactivity to external stimuli symptoms of traumatic stress among young people in Kakuma Division.

1.6 Research Hypotheses

- H0₁: There is no statistical significant effectiveness of Narrative Exposure Therapy Intervention in management of memory intrusion symptoms of traumatic stress among young people in Kakuma division.
- H0₂: There is no statistical significant effectiveness of Narrative Exposure Therapy Intervention in management of avoidance of stimuli symptoms of traumatic stress among young people in Kakuma division
- H0₃: There is no statistical significant effectiveness of Narrative Exposure Therapy Intervention in management of negative alterations in cognitions and mood of traumatic stress among young people in Kakuma division.
- H0₄: There is no statistical significant effectiveness of Narrative Exposure Therapy Intervention in management of alterations in arousal and reactivity to external stimuli symptoms of traumatic stress among young people in Kakuma division.

1.7 Significance of the Study

The research findings may be useful to organizations, institutions and individuals. The international bodies and organizations working in refugee settlements could be enhanced by this study with knowledge about the risk of traumatic stress and the need for effective evidence and quality trauma-based interventions for survivors. Since narrative exposure therapy targets fragmented memory presentations, trauma survivors living in Kakuma could be helped to construct their life narrative in a coherent and meaningful presentations thereby regaining their lost esteem and values. They could be helped to construct a new and positive world view. The study recommendations may be incorporated

in the treatment plans by counsellors, psychologists, social workers, community health workers and other mental health practitioners working among refugees and traumatized population. The findings may serve as a reference material for policy makers, researchers, and others working with refugees and survivors of trauma within and outside the country.

School counsellors may benefit from the findings. Since the narrative exposure therapy approach is easy to follow, they may find it easy to incorporate it in their counselling practice to help students who are still living with symptoms of traumatic childhood. Young people themselves who have had traumatic experiences could be well informed of the impact of trauma symptoms and the need to seek help and work towards wholeness and healing. Students of counselling and psychology in higher institutions of learning and trainers may find the study recommendations valuable to inform evidence trauma-based interventions in their professional development. The study could add to the credit of efficacy of narrative exposure therapy as a novel trauma intervention.

1.8 Scope of the Study

The study was conducted on young people aged 15-24 who are living in Kakuma division of Turkana County. The study sought to assess the effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma division. The study area was within Kakuma, which is the headquarters for Turkana West District of Turkana County in the northwestern part of Kenya. Kakuma is 120 kilometers from Lodwar town and 95 kilometers from Lokichoggio, the border town of Kenya and South Sudan. The study area was limited to Kakuma refugee camp. The study focused on traumatic stress symptoms among participants according to DSM-5 symptom clusters which include memory intrusion symptom cluster and others.

1.9 Delimitations of the Study

The research assessed the effectiveness of narrative exposure therapy intervention in management of the presence of memory intrusion symptoms, avoidance of stimuli symptoms, negative alterations in cognitions and mood symptoms and alternations in arousal and reactivity to external stimuli symptoms. The overall study focused on the effectiveness of narrative exposure therapy in the management of traumatic stress among young people in Kakuma division by determining the statistical significant differences between young people subjected to NET intervention in the treatment group and those exposed to normal counselling in the control group.

1.10 Limitations of the Study

The research was limited to the sampled population and the information they were willing to share. The researcher encouraged respondents to provide genuine and reliable information about themselves during the study. This was quasi - experimental study which may not reflect similar outcomes of other populations who have received the same intervention in other studies. The researcher did not have control over the outcome of the study final results. Since trauma intervention requires expert training, the researcher was not able to travel with research assistants from Nairobi to Kakuma due to cost implications and Covid-19 restrictions. Consequently, the researcher made use of counsellors available in Kakuma and offered them brief training in administering narrative exposure therapy intervention and normal counselling intervention. The timeframe of the research was partly affected by the ongoing global pandemic of Covid-19. The researcher utilized all available

chances to forestall further delay, for instance by making use of online platform. The researcher encouraged participants to exhibit appropriate behaviour during the study.

1.11 Assumptions of the Study

The study was guided by the following assumptions that;

- i. Young people from Kakuma refugee camp had had traumatic stress experience and it could be treated using narrative exposure therapy (NET) intervention
- ii. The respondents provided reliable information.

1.12 Theoretical Framework

This study adopted Narrative Exposure Therapy (NET) model of intervention for traumatic stress. Narrative exposure therapy (NET) is based on Dual Representation Theory (DRT) and the Theory of Fear/Trauma Network also called Emotional Processing Theory (EPT) (Schauer, Neuner & Elbert, 2005). Dual representation theory (DRT) adopts a cognitive approach to understanding post-traumatic stress disorder (PTSD). Chris Brewin, Tim Dalgleish and Stephen Joseph proposed the theory in 1996 and in it discussed how the memories of information connected to traumatic experience are represented in two levels. The first representation is what the individual is conscious about the traumatic event. This level of representation in memory is called Verbally Accessible Memories (VAM). Information stored here can be consciously recovered by the trauma survivor and gradually be communicated and rewritten. The second representation is what Brewin, Dalgleish and Joseph (1996) called Situationally Accessible Memories (SAM). Traumatic memories here are only accessed due to triggers of the original traumatic experience. Consequently, flashback memories are judged to be the products of the activation of

situationally accessible memory (SAM) representations. Brewin et al., (1996) maintained that processing the emotional experience of the traumatic event may be hampered due to avoidance effort to reactivate distressing and unwanted memory information stored in the two memory representations unless under certain circumstances of therapeutic nature.

The second theory in which narrative exposure therapy intervention is anchored on is called Fear/Trauma theory (Foa & Kozak, 1986). It is also called Emotional Processing Theory (EPT) or Information Processing Theory (IPT). The foundation of this theory is Peter Lang's (1979) bio-informational theory of fear. Accordingly, fear is understood in memory as a thought process that works to prevent an individual from experience danger or psychological distress. Fear as a thought structure or cognitive process in this theory involves three types of information namely; associated stimulus, that is information about the feared stimulus; response element, which is information about verbal, psychological and overt behaviour responses, and meaning element, that is interpretation given to the stimulus and response elements.

Thus three elements that must be present to make a complete fear setup structure are; Stimulus, Response and Meaning. For instance, a gun may be a stimulus element of the fear structure. The sight of the gun under certain conditions may trigger different psychosomatic reactions as responses, which may include running for safety, hiding, fast breathing or sweating. This is followed by various Meaning elements, for instance: 'war has started again', 'I am going to die' or 'I am not safe'. When environment cues correspond with any or more of the features in the fear components registered in the mind of the survivor, the response for safety is triggered. This spreads in an entire individual network and re-traumatized the survivor (Rauch & Foa, 2006).

The proponents of this theory therefore opined that specific pathological fear structures trigger trauma and other disorders related to trauma. Neurotic fear components differ from what constitute normal fear because of the presence of excessive responses that are disproportionate to reality (Foa et al., 1986). Thus, the association of different elements in the fear response is different from what is in reality. In emotional processing theory of traumatic stress, Foa and Rothbaum (1998) observed the fear elements of trauma to include disproportionate stimuli and responses together with elements of meaning that are pathological. In this theory, activation of fear is through association of networks that include information about the feared stimulus, escaped or avoidance responses to the feared stimulus and the meaning of fear. Accordingly, it is proposed that exposing an individual has the potential of modifying the association between the fear stimulus and these networks through activation of the fear network. Consequently, new information is acquired that is not in consonance with the fear components. This means remaining in touch with the fear stimulus until a decrease in the level of fear permits a new set of information that do not match the fear stimulus. This is when habituation is attained.

Narrative exposure therapy intervention which is built on the two theories mentioned holds that during traumatic events, sensory and perceptual information like sound of gunshot or smell is kept in memory during traumatic experience. The individual becomes hyper-reactive with fast heartbeat, perspiring, or nervous and is set for actions for safety such as running away or escaping (Schaurer et al., 2011). This emotional and sensory information is stored separately from the information related to the content. It is stored in an interconnected neural network which may establish a fear network. The fear and/trauma network includes sensory, cognitive, physiological, and emotional experience, including

the action disposition related to the experience; this is what is called ‘hot memory’ or Situationally Accessible Memory (SAM). Since this information is not consciously processed, it manifests as intrusive thoughts. Environmental stimuli like sound, or smell and internal cues like thoughts are capable of igniting the fear system network in an individual at any point in time (Foa, Hembree & Rothbaum, 2007). The ignition of few of these components in the system is adequate to ignite the entire structure. Memories stored here are retrieved automatically and involuntarily as intrusive images. This is believed to be a flashback, the belief as though one is back in the traumatic circumstance.

In contrast to the extensive fear network of trauma memory, trauma survivors are faced with challenges of telling their life story in a chronological way; what is referred to as autobiographical memory. They find it difficult to situate accurately their experience of traumatic event in a timeline. This and the effort to avoid re-experiencing contribute to make trauma survivors unable to tell their trauma story in a logical manner (Neuner, 2012). Narrative exposure intervention works by reconnecting hot and cold memories of the traumatic experience while maintaining a separation of the memory indications of the different traumatic events. Narrative Exposure Therapy (NET) enables trauma survivors to recall and narrate their traumatization with emphasis on time and place of the event while at the same time re-experiencing the emotions. In the process hot implicit memories are integrated into the unfolded cold declarative memories. This allows majority of clients to undergo habituation of emotional response to the traumatic memory which leads to a remission of anxiety disorder (Neuner et al., 2008; Foa & Kozak, 1991).

The therapeutic procedures of NET therefore consist of a relatively small number of 90-120 minutes of 4-12 sessions (Paulann & Reuben, 2018). Trauma survivors are

helped by the therapist to narrate a complete and consistent story of their life in a therapeutic settings. The emphasis of narrative exposure therapy (NET) rest on the clients' accomplishment and incorporation of the dissociative and distressing memory of traumatic event into a narrative whole. The therapist helps the client to take cognizance of the sensory, physiological, emotional, and cognitive elements of the traumatic event. The procedure begins with assessing the client's mental health status and diagnosing a post-traumatic stress disorder (PTSD). Following this evaluation, a psycho-educational introduction is presented to the trauma survivors. The focus of the psycho-education is on the explanation of the symptoms disturbance and to prepare the client for therapeutic intervention whereby re-experiencing and catharsis are core experiences of clients in the therapy (Neuner, 2012).

Treatment begins the moment following the initial diagnosis. A typical narrative exposure therapy (NET) approach extends over the following topics; personal background and individual history prior to the first traumatic event, experiences from the beginning of the threat to the first terrifying event, terrifying events, history of escape from the or ending of violent conditions, life thereafter, and plans, hopes, fears concerning future. When an individual brings back past events memories, the type of memory that is generally retrieved first is called autobiographical memory (Conway & Pleydell-pearce, 2000). The order of autobiographical memory structure is the memory of lifetime periods which presents an overall information of persons, places, activities, among others that describes a period in time. The memories cover a time phase showing recognizable beginning and ending points in an individual life experience (Schauer et al., 2011).

1.13 Conceptual Framework

A conceptual framework is a model of presentation and graphical representation of relationships between variables in a study (Orodho, 2012). Figure 1.1 presents the conceptual frame work of narrative exposure therapy intervention and management of traumatic stress.

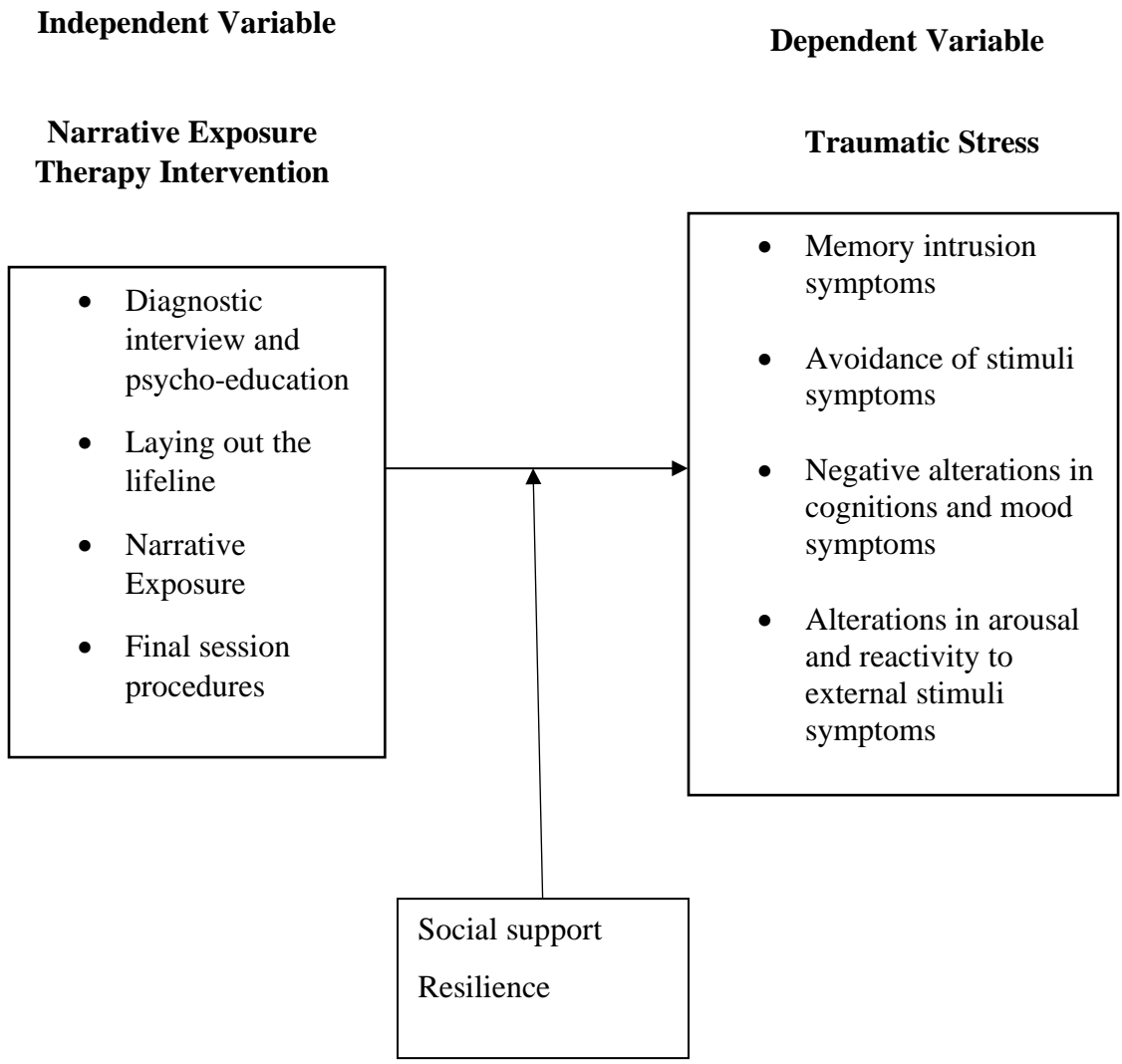


Figure 1.1: Conceptual Framework of Narrative Exposure Therapy Intervention and Management of Traumatic Stress

In this study, the independent variable is narrative exposure therapy intervention which has the following procedures; diagnostic interview and psycho-education, laying out the lifeline, narrative exposure and final session procedures (Schaurer et al., 2011). The study applied NET intervention and normal counselling intervention as independent variable. The dependent variable in this study is traumatic stress with the following indicators; memory intrusion symptoms, avoidance of stimuli symptoms, negative alterations in cognitions and mood symptoms and alterations in arousal and reactivity to external stimuli symptoms. At the end of the study, narrative exposure therapy intervention was able to effect a reduction in the level of memory intrusion symptoms, avoidance of stimuli and the two other symptom clusters of traumatic stress among young people in Kakuma. The intervening variable like social support and resilience could influence the study outcome either positively or negatively. The intervening variable was assumed to be constant and therefore had no practical effect on the study outcomes.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the review of literature on the effectiveness of narrative exposure therapy intervention in the management of traumatic stress. The review was based on the objectives of the study, namely; memory intrusion symptoms, avoidance of stimuli symptoms, negative alterations in cognitions and mood symptoms, and alterations in arousal and reactivity to external stimuli symptoms. The chapter ends with the summary of review and research gaps.

2.2 Review of Literature

As Briere and Scott (2015) posited, the history of humankind is not limited to the stories of art, discoveries in science and culture, but it is also about interpersonal violence, oppression and a plethora of disasters. The various disasters both natural and human-made were captured in a research by the World Health Organization (WHO), World Health Mental Surveys (WHMS). In a sample of 26 different countries across the world involving high, middle and low income settings, Kessler et al., (2017) examined 29 different types of traumatic events among the participants. Exposure to one or more traumatic events in a lifetime was recorded to be 70.4%. The most common trauma types were unanticipated loss of life of a loved one which recorded 31.4%. Direct exposure to death or critical injury was 23.7%. The next most common trauma types were assaults (14.5%), life-threatening accidents involving automobile was 14.0%, and grave illnesses was 11.8%. In terms of wider classification, the most frequent traumatic events recorded were those that happened

to loved ones or experienced personally (35.7%). Unexpected loss of life of loved ones recorded 31.4%, physical abuse and violence was 22.9%, intimate partner sexual assaults registered 14.0%, and war-related traumas recorded 13.1%.

An effective trauma intervention targets the four domain symptom clusters that affect an individual. Narrative exposure therapy intervention targets fragments of traumatic memories to aid their integration through the procedure of psycho-education, lifeline narration, and habituation. Traumatic experience disrupts one's sense of control (Herman, 2015). Consequently, trauma survivors display different behavioural and cognitive patterns to aid their coping and survival due to the presence of fear network structure (Rauch & Foa, 2006). The fear network structure is hidden behind the symptom clusters. Therefore an effective trauma intervention takes cognizance of trauma symptoms (Foa et al., 2007). As Im, Jettner, Warsame, Isse, Khoury, et al. (2018) in their study among Somali refugee youths in urban Kenya averred, trauma-informed psycho-education intervention is an effective way of managing high mental health, emotional needs and other psychosocial needs of refugees in low resource settings.

2.2.1 Narrative Exposure Therapy Intervention and Management of Memory

Intrusion Symptoms

The dual representation theory (DRT) of Brewin, Dalgleish and Joseph (1996) is a theory of how traumatic memories are stored and retrieved in the brain. Traumatic memories are retrieved by means of activation. Distressing intrusive memory is one of the symptoms that indicate traumatization. The memories intrude upon a person's mind in different forms and affect functioning. These memories come in variations such as nightmares, dissociative flashbacks whereby the person's state of consciousness is altered.

The individual acts and feels the same way during the first experience of the traumatic event. Intrusive traumatic memories include recurrent distressing dreams in which the content of the dream are related to traumatic events (Herbst et al., 2016). Intrusive memories typically take the form of visual images but can also include sounds, smells, tastes and bodily sensations. An individual experiences the recurrent flashbacks with a lot of unpleasant feelings connected with the hot memory of the traumatic event (Kessler et al., 2018). Intrusive memories for most people decrease over time while for others they persist, causing significant level of psychological distress.

Intrusive memories according to Iyadurai et al. (2019), are capable of causing clinical malfunctioning in an individual either at the early stage of traumatic experience or later on in life. In a research on the psychiatric effect of automobile accidents by Mayou, Bryant, and Duthie (1993) as cited by Iyadurai et al., intrusive memories in the first few weeks were recorded to be 76%, after three month it dropped to 25% and 24 % in one year. As Van Rooyen and Nqweni (2012) observed, trauma in its clinical sense is extremely difficult and overwhelming for individuals. In some cases traumatic memories may not be in concomitant with psychological distress for some people (Berntsen, 2009).

Cognitive approaches to understanding traumatic stress maintain that intrusive memories of trauma is at the center of symptomatology, influencing other traumatic symptoms within the symptom clusters of traumatic stress (Brewin, 2014). When intrusive memories occur, they ignite higher levels of physiological and psychological reaction. This inevitably disrupts an individual functioning and attentiveness to daily operation (Clark & MacKay, 2015). Network theories of traumatic stress posit as well that intrusive memories are intrinsically associated with other symptom clusters in the trauma network and are

probably able to cue other symptoms of psychological disorders (Bryant et al., 2017). This is in line with the fear/trauma network developed by Foa and Kozak (1986).

In a study by Kessler et al. (2018) on recurrent intrusive traumatic memory reduction using a visuospatial interference intervention, 20 participants took part in the study. Those who met the criteria for intervention response were 16. The outcomes of the study revealed 64% average reduction in targeted intrusion from pre-test level to the post-test phase. Conversely, intrusions that were not aimed at reduced by an average 11% over a similar time frame. Commenting on the general approach to intrusive memory healing, Holmes, Sandberg and Iyadurai, (2010) maintained that a successful therapeutic outcome of memory intrusion intervention is not for the traumatized person to expunge from consciousness the traumatic memory. On the contrary, it is to intentionally remember the event without functional impairment or having recurrent disruptive and distressing feeling. This is what in narrative exposure therapy intervention is called habituation (Schaurer et al., 2011).

Among Liberian refugees in Nigeria, Olubunmi and Dogbahgeen (2013) conducted a research with a sample size of 167 refugees. Ninety four (94) of them were male and 73 female. The posttraumatic stress disorder checklist (PCL civilian version) was administered to measure the level of PTSD. The first five questions of this tool capture intrusion symptoms. 74% (127) reported re-experiencing with a mean score of 60.18. The study concluded that there is a PTSD probability high level among people with untreated trauma. Interventions to traumatized individuals may not yield effective result if they are not trauma-focused. A case in point is Tibetan refugees with 20% rates of PTSD who coped well with loss and other events using traditional coping and spiritual coping but did

not recover from trauma using the same mechanism (Paula & Bonnie, 2004; Varkey, 2010). This shows that intervention for traumatized individuals must be trauma specific interventions and must target the source of distress. Individuals with severe symptoms like refugees population due to multiple traumas when left untreated develop greater vulnerability to PTSD and comorbid disorders. (Chloe, Chessen, Comtois & Landes, 2011). In narrative exposure therapy, clients who manage to construct a coherent narrative of the traumatic event during exposure therapy profit most from treatment (Neuner, 2012). The focus of narrative exposure therapy (NET) approach therefore is to encourage the activation of painful memories through narration and to prevent the client's strategies of avoiding or ending activation. (Schaurer et al., 2011).

2.2.2 Narrative Exposure Therapy Intervention and Management of Avoidance of Stimuli Symptoms

Avoidance symptoms are often seen as a coping mechanism whereby a person tries to avoid distressing experiences like memories, places, people, events and things that are reminders of traumatic events. Avoidance keeps pains associated with trauma alive and active in the mind. The brain continuously reasons that there is an immediate threat to life (Herbst, et al., 2016). By deliberately trying to prevent emotional reminders of past traumas, a longer term of suffering is inevitably brought about. Psychodynamic Therapy (PDT) deals with avoidance as repression. When avoidance begins, it acts as a defense. It becomes neurotic as it gets to the way of functioning. Against this backdrop, Sigmund Freud described repression as an unintentional elimination of materials from awareness. Further, it is explained as frightening or painful cognitions and emotions that are relegated and excluded from consciousness (Corey, 2013). By attending to clients, Freud believed

that memories of traumatic events were neurotic because trauma survivors did not want a reminder of the impacts of the traumatic experience. Freud described repression as the basis of neurotic disorders, adding that the painful events of life that are buried, later influence behavior in a disrupting and distressing way (Howard, 2017).

In this regard, free association has been used as one of the fundamental techniques to bring things back to awareness. This often leads to remembering past events and at times gives rise to catharsis whereby an individual is let loose of blocked emotions that affected functioning (Sharf, 2012). During this therapeutic process of free association, the therapist is tasked with the responsibility of identifying clients' feelings and emotions that have been repressed and locked in the unconscious. Overall, the procedure in psychoanalytic approach to healing avoidance symptoms is aimed at bringing traumatized persons to the level of awareness of repressed materials within their network of fear and trauma for proper functioning. (Howard, 2017). Although studies assessing psychodynamic therapy for the treatment of traumatic stress are limited, (Ponniah & Hollon, 2009) in a review study quoted by Brom et al. (1989), made a comparison of treatment between psychodynamic intervention and a control condition. Patients who were exposed to psychodynamic therapy treatment reported a significant decrease in PTSD symptoms compared to those subjected to a control group and a waitlist control condition. Hendin (2014) maintained that psychodynamic therapy intervention was successful in reducing traumatic stress symptoms and suicidal ideation behaviours among combat veterans using a short term 12-session treatment approach.

Few studies have emphasized the detrimental effects of trying to cope with avoidance (Paula & Bonnie, 2004). The bio-psychosocial model to trauma healing

maintains that defensiveness, avoidance, and repression are typically associated with higher cortisol levels, greater cardiovascular reactivity and immune dysfunctioning (Biondi & Picardi, 1999). If trauma symptoms of avoidance are not addressed, traumatized individuals are likely to develop not only psychological disorders like depression or anxiety but also physical symptoms due to impaired immune functioning. Therefore an approach to dealing with avoidance of trauma memory is through emotional expression and disclosure which is a form of narrative (Helgeson, & Mickelson, 2000). The researcher finds it necessary to address each particular symptom cluster. This is because a technique that works for cognitions and mood changes may not address avoidance symptoms. Avoidance which in its strict sense includes escapism, wishful thinking, and self-isolation leads to psychological distress and mental health challenges and therefore must be treated with trauma specific interventions.

2.2.3 Narrative Exposure Therapy Intervention in Management of Negative

Alterations in Cognitions and Mood Symptoms

The third cluster of traumatic stress symptoms includes changes in how a person thinks and feels. The emotional and mood disturbances associated with this cluster include fear and anxiety, disgust, shame or any other negative emotions including having no interest in previous activities of importance (Dimauro et al., 2014). In some cases, trauma survivors may struggle to remember parts of the events they have experienced. In extreme cases they may not remember the event at all. A traumatized individual may not remember certain important aspect associated with the experience of trauma due to dissociative amnesia (Gold & Cook, 2017). Trauma survivors may have enduring negative and extreme thoughts about themselves, the world and other people. This persistent and exaggerated

negative beliefs and unrealistic blame of self or others regarding the cause of the traumatic event or expectation about oneself, others and the world is what Aaron Beck (1967) refers to as Cognitive distortions. These cognitive changes contribute to the severe dysfunction in how a person approaches relationships and many other aspects of life.

Trauma –focused cognitive behaviour therapy (TF-CBT) has been used to address faulty cognitive schemas of traumatic stress. The study of effectiveness of CBT by Akbarian et al. (2015) showed that a highly standardized CBT programme significantly reduced symptoms of traumatic stress and other disorders like anxiety and depression. Compared to those treated with pharmacopeia only and those in control condition, the study equally demonstrated improved memory performance. The study sampled 40 respondents experiencing traumatic stress symptoms with mean age of 31.64 years, 78.6% of them were female. Random sampling was used to assigned respondents to an experimental group and a control group. In a ten group sessions of 10 weeks of TF-CBT lasting 60-90 minute per session, a reduction of symptoms of traumatic stress, depression and anxiety were recorded. Memory performance showed higher improvement. The study concluded that TF-CBT enhanced reduction of traumatic stress with regards to symptoms and autobiographical memory. Refugees who have resistance to pharmacological treatment of PTSD have benefited from CBT according to study by Hinton, Hofmann, Pollack and Otto (2009) on efficacy of CBT for Cambodian refugees with PTSD.

A study by Gitau (2018), on effectiveness of Virginia Satir's model was tested against improving rational thinking of integrated internally displaced persons (IIDPs) diagnosed with PTSD. The results showed that the mean scores of respondents on rational thinking were statistically significant with $F= 15.74$ and $P < 0.00$, implying that the

experimental groups had higher rational thinking scores than control groups. Processing negative thoughts using Satir's model helped the IIDPs differentiate between negative and positive thoughts together with their subsequent behaviour. The study findings concluded that Virginia Satir's model enhanced IIDPs rational thinking thereby addressing the symptoms of negative changes in thoughts and feeling cluster of traumatic stress.

Treatment of traumatized refugees remains a challenge (Buhmann, 2014). This is because most treatments approaches are not culturally adaptive and do not target the affected domain of distress (Crawford, Talkovsky, Bormann & Lang, 2019). There is evidence that intentional trauma such as war or assault which refugees faced is associated with high risk of PTSD than unintentional trauma such as natural disaster and traffic accident (Santiago et. al., 2013). Trauma interventions must therefore be intentional. Evidence of improvement in cognitions recorded in other approaches (Lee & Cuijpers 2013) may not address the cause of distress. The researcher sought to address refugees' traumatization in Kakuma through the application of narrative exposure therapy because of its intentionality. The symptoms were assessed before treatment and the procedure were directed towards the hot memories. The intervention was culturally adaptable to rural and low income settlements like Kakuma.

2.2.4 Narrative Exposure Therapy Intervention in Management of Alterations in Arousal and Reactivity to External Stimuli Symptoms

The symptoms of hyper-arousal and reactivity include irritability and anger outbursts with little or no provocation. Traumatized individuals have feelings of being in danger all the time and so they become hyper-vigilant. There is an overly strong startle response, and concentration and sleep problems (Dimauro et al., 2014). This over-reactivity

is sometimes referred to as hyper-arousal. In this domain of symptoms cluster, the individual is in a constant state of hyper-vigilance as a result of elevated levels of stress hormones like adrenaline and cortisol flooding the body system (Paula & Bonnie, 2004). This results of this is emotional restlessness, anxiety, irritability, or feeling out of control. High levels of adrenaline lead to physiological responses such as elevated heart rate, palpitations and sweating. There is also an increase in feelings of uncontrollable anger or rage and wild mood swings as the nervous system becomes overloaded with stress hormones, survivors may sway between high levels of agitation and total exhaustion (Sanderson, 2013).

Few studies have been done to address this cluster of traumatic stress symptoms. However, some studies on certain techniques have recorded reduction in hyper-arousal symptom. A study by Crawford, Talkovsky, Bormann, and Lang (2019) was carried out on 173 veterans. The target was hyper-arousal symptoms through Mantram Repetition Programme (MRP) for traumatic stress. The mean age of the participants in the study was 48.90 with a standard deviation of 14.54. Individual therapy was given to all the participants. The treatment was delivered weekly at 60 minutes per session in eight weeks. There was a reduction in all symptom clusters of traumatic stress. MRP facilitated a significant reductions in hyper-arousal and hyper-vigilance to external stimuli at post-test with Hedge's $g = 0.57$. Hyper-arousal was $g = .52$ at follow-up. Numbing was $g = 0.47$ at post-treatment. The study concluded that hyper-arousal facilitated reductions in the other symptom clusters of traumatic stress.

It has been shown that individuals with hyper-arousal symptoms may present with panic disorder and its sudden terrifying fear that seems unrelated to immediate life events.

Due to extreme reactivity, survivors sometimes become violent towards others subsequent to their victimization. (Flannery, 2001). Survivors of violence sometimes become perpetrators of violence toward others at subsequent times in their lives in a bit to undo their victimization. Hyper-arousal response may result in an ingrained maladaptive pattern of behavior over time and can lead to antisocial personality disorder in young people (Min, Tracy, & Park, 2014).

Treatment of traumatic stress through mindfulness-based stress reduction therapy such as Matram and meditation have shown reduction in certain symptoms only in a modest way (Polusny et al, 2015). Addressing traumatic stress management in a general sense without directing the intervention to specific area may not yield lasting result and may leave individual still fragmented. Since refugee populations do not have single traumatic event experience but multiple traumas (Buhmann, 2014), therapeutic approaches that joint fragmented memories of individual experience into a coherent narrative may be more efficacious in dealing with refugees experience. The focus of initial exposure therapy was on the most distressing experience among traumatic events an individual has witnessed (Foa, Hembree & Rothbaum, 2007). On the contrary, narrative exposure therapy looks at the ‘Gestalt’ life story of an individual to join the pieces of individual experience into a narrative whole.

2.3 Summary of Review of Literature and Research Gaps

From the literature review, various studies conducted on the effectiveness of counselling interventions on traumatic stress have been examined. However there are limited studies addressing individual clusters of traumatic stress symptoms, rather PTSD symptoms as a whole have most often been considered in different studies. This study aims

to fill that gap by addressing individual clusters of traumatic stress symptoms through the application of narrative exposure therapy intervention. Among the traditional approaches to trauma counselling, TF-CBT has been reputed to be the most effective in dealing with traumatic stress symptoms especially cognitive symptoms cluster through restructuring and reframing (Hofmann, Asnaani, Vonk, Sawyer & Fang, 2012). However postmodern approaches are still undergoing clinical trials in many countries. Narrative exposure therapy (NET) is one of the postmodern approaches to trauma healing. Intervention studies done in the area of trauma healing among young people are limited and no recorded research on trauma counselling intervention has been done among young people in Kakuma. Equally no intervention study of narrative exposure therapy (NET) has been done in Kenya. This study sought to fill in these gaps.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses research methodology that was used in carrying out the study. It outlines research design, research site, target population, study sample, data collection techniques, data processing and analysis, and legal and ethical considerations. The study sought to establish the effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma division.

3.2 Research Design

This study used quasi-experimental design in which the researcher adopted a Non-equivalent groups design. This design involved one experimental group and one control group. The treatment group received a pre-test for traumatic stress, narrative exposure intervention and a post-test. The control group received a pre-test and post-test and a normal counselling intervention for ethical reasons since they could not be left unattended (Leavy, 2017). This design is suitable for testing the effect of a single independent variable that can be used as a treatment. This design is usually illustrated using a standardized design notation of 'N' and 'X'. Depicted with 'N' is non-equivalent assignment, 'X' signifies the treatment subjected to the experimental group, and 'O' symbolizes pre-test or post-test results of the dependent variable. Subscripts are added to differentiate pre-test and post-test results of experimental and control groups (Creswell & Plano Clark, 2018). In this design, respondents were subjected to an initial assessment of the dependent variables through the use of PTSD Checklist for DSM-5 (PCL-5) supported with life events checklist

for DSM-5 (LEC-5). Those who met the criteria for traumatic stress were selected into the control group and experimental group. While the experimental group received treatment representing the independent variable by being subjected to narrative exposure therapy intervention, the control group was subjected to normal counselling intervention. Both the treatment and control groups underwent post-test assessment to determine statistical significant differences after the experiment.

3.3 Research Site

The research was conducted in Kakuma refugees' camp in Turkana County. Kakuma division is in Turkana District of the Northwestern region of Kenya which is 120 kilometres from Lodwar District Headquarters and 95 kilometres from the Lokichoggio Kenya- South Sudan border (Sanghi, Onder & Vemuru, 2016). The camp was established in 1992 to accommodate survivors fleeing civil war and increasing atrocities from their countries. According to UNHCR (2020), Kakuma currently hosts 196, 666 refugees from 21 different countries. The area is suitable for the study due to traumatic events that have brought people from different countries. Kakuma is equally the largest refugees' camp worldwide with diversity of nationalities (UNHCR, 2015). The diversity of population from different nationalities provided culturally sensitive perspectives to the study. The researcher has visited Kakuma camp prior to deciding on the topic of this study and witnessed the living conditions and the stories surrounding young people coming to live in Kakuma. This background informed the researcher interest to carry out an experimental study on the effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma division.

3.4 Target Population

A target population refers to entire population the researcher intends to make conclusions from the findings of the study (Obwatho, 2014). The target population in this study consisted of young people living in Kakuma. According to the UNHCR (2017) youth strategy report covering 2017-2019, there is a total of 39,960 registered youth between the ages of 15 – 24.

3.5 Sampling Procedures and Sample Size

Sampling size refers to selected items from the entire group to make up a sample (Kothari, 2004). The study used the multistage cluster and proportionate sampling techniques to determine population for the study. Five settlements were identified through cluster sampling. The five settlements had five Secondary Schools which form another cluster. Form three students were selected from the Five Secondary Schools to participate in the study. This forms another cluster. Participants were selected through proportionate sampling from Form three to form the sample size of the study. Form three has a population of 3,143 distributed across the five secondary schools (Windle International Kenya, School Data, 2020). A sample size of 110 respondents was obtained through proportionate sampling of the sampling population. According to Kathuri and Pals (1993), a minimum of 100 is recommended for a survey research.

Table 3.1:**Sample Size of the Study**

Cluster/ Schools	Population of students in Form 3	Proportion	Sample Size
Cluster A/ Kakuma Refugees' Secondary School (KRSS)	879	0.31	31
Cluster B/ Green Light Refugee Secondary School (GLSS)	670	0.23	23
Cluster C/ Somali Bantu Secondary School (SBSS)	786	0.28	28
Cluster E/ Vision Secondary School (VSS)	713	0.25	25
Cluster E/ Morneau Shappel Secondary School (MSS)	95	0.03	3
Total	3,143	1.10	110

3.6 Data Collection

Data collection procedures deal with how the research instruments are administered and collected (Walliman, 2011). The researcher involved research assistants who helped in administering and collection of data.

3.6.1 Data Collection Instrument

Researchers choose which type of instrument or instruments to use based on the research questions. This study adapted the PTSD checklist for DSM-5 (PCL-5). This was used to do the pre-test and post-test of traumatic stress symptoms. The instrument draws all its questions from the four clusters of post-traumatic stress symptoms in DSM-5. The survey instrument had twenty items of 5-point Likert type scale covering traumatic stress symptoms according to this study objectives. Memory intrusion symptoms questionnaires

(5 items), avoidance of stimuli questionnaires (2 items), negative alterations in cognitions and mood questionnaires (7 items) and alternation in arousal and hyperactivity to external stimuli symptoms questionnaires (6 items).

3.6.2 Piloting

Piloting of research instruments refers to trying out the data collection instruments before they are actually used to collect data for the study. The term pilot study is used in two different ways in social sciences research. It can refer to so-called feasibility studies which are small scale versions, or trial runs, done in preparation for the major study (Polit, Beck & Hungler, 2001). The researcher identified a youth population in Kibera in a rescue home called New Life Home run by a religious body to pilot the research instrument. Kibera currently known as Kibra which is an informal settlement in the capital city of Nairobi is considered one of the hotspots for pre and post-election violence. It was recorded that 18% of youth from here developed chronic PTSD after post-election violence of 2007/2008 (Gitau, 2018). The Home rescues people who have been traumatized and abandoned to offer them psychosocial support. The researcher piloted the research instrument with 40 young people who have had traumatic experiences as a result of life threatening violence in Kibera. The purpose was to help the researcher to remove ambiguities in the research instrument to ensure that it produces valid research results. This number is supported by Kathuri and Pals (1993).

3.6.3 Instrument Reliability

The reliability of the research instrument is concerned with the level of consistency in which a particular research instrument gives similar results over a number of repeated

trials (Orodho, 2012). The reliability of PCL-5 has been ascertained in other studies; for instance a study done by Blevins, Weathers, Margaret, Witte, and Domino (2015), on PTSD Checklist for DSM-5 (PCL-5); development and initial psychometric evaluation. PCL-5 scores exhibited strong internal consistency ($\alpha = .94$), test-retest reliability ($r = .82$), and convergent ($r_s = .74$ to $.85$) and discriminant ($r_s = .31$ to $.60$) validity. However, in order to ensure dependability, the researcher still subjected the standardized instruments through pilot testing to ensure consistency and accuracy making the findings dependable and the study replicable. Reliability tests commonly used to check the internal consistency of scales in survey research are Cronbach's alpha and factor analysis (Leavy, 2017). As Creswell and Creswell (2018) opined, "a scale's internal consistency is quantified by a Cronbach's alpha (α) value that ranges between 0 and 1, with optimal values ranging between .7 and .9." Reliability coefficient was calculated using Cronbach's coefficient alpha of 0.7 as an appropriate threshold for social sciences (Kothari, 2004).

3.6.4 Instrument Validity

Validity of research instrument measures the extent to which a research measure actually captures the meaning of the concept it is intended to measure (Abbott et al., 2013). Creswell (2018), holds that for an existing instrument to be used as a research instrument, the established validity of scores obtained from the use of the instrument in the past needs to be described. The validity of PCL-5 has been established in previous studies. For instance a study by Ibrahim, Ertl, Catani, Ismail, and Neuner, (2018) on the validity of PTSD Checklist for DSM-5 (PCL-5) as screening instrument showed a high level of the internal consistency ($\alpha = .85$). The cut-off score of 23 was used. The PCL-5 as a screening tools achieved the following result; area under the curve = $.82$, $p < .001$;

sensitivity = .82, specificity = .70. The results affirmed that the PCL-5 can be recommended as an assessment and screening instrument.

According to Borg and Gall (2003), instrument validity can be enhanced through expert judgment. In this case the expert validation of the research instrument confirmed by the supervisors. The content validity was determined by experts' judgment if it matches the objectives of study. The construct validity was equally judged by experts' scrutiny from the counselling psychology department if it matches operational definitions of the study. The researcher took note of threats to internal validity through the use of pre-test and post-test and by keeping respondents in experimental and control groups separate and randomly assign subjects to the experimental and control groups.

3.6.5 Data Collection Procedures

The researcher obtained a letter from Africa Nazarene University which introduced the researcher to obtain a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) to the study area. The researcher reported to appropriate authorities in Turkana County like the County Commissioner and the County Director of Education. In addition, the research obtained a letter of authorization from the Refugee Affairs Secretariat (RAS) to enable the researcher enter the refugee camps. Prior to collecting the data, the researcher together with research assistants visited the five secondary schools in Kakuma for introduction and obtained a date for data collection. The researcher equally discussed issues of confidentiality and respondents' rights to participate or withdraw from the study according to the ethics of the counselling profession (APA, 2017). The researcher followed the policies of Windle International Kenya, An agency responsible for secondary education in Kakuma.

3.7 Data Processing and Analysis

Data analysis consists of preparing and organizing the data for analysis, then reducing the data into themes in qualitative through a process of coding and condensing the codes, and finally representing the data in figures, tables, or a discussion (Creswell et al., 2018). In this study, descriptive data was analysed in frequencies and percentages and presented using, tables, bar charts and pie charts. Independent samples t-tests were employed to present statistical significant differences between the means in the pre-test and post-test scores for the groups. A comparison of the means between the pre-test and post-test was used to determine any statistical differences in the management of memory intrusion symptoms, avoidance of stimuli symptoms, changes in cognitions and mood and hyper-arousal symptoms. Hypotheses were tested at alpha ($\alpha = 0.05$) level of significance. Analysis was aided by Statistical Package for Social Sciences (SPSS) Version 23 for Windows.

3.8 Legal and Ethical Considerations

Ethics are the norms or standards for conduct that distinguish between right and wrong. Ethics help to determine the difference between acceptable and unacceptable behaviours (APA, 2017). Ethical standards prevent the fabrication or falsifying of data and therefore promote the pursuit of knowledge and truth which is the primary goal of research. The researcher was careful to observe ethical issues relating to this particular study. The research questionnaire included instructions on how to fill the research instrument. The introduction to the questionnaire explained the purpose and nature of the study and assured all the respondents of confidentiality. This ensured that the participants were able to make

informed decisions on whether to participate in the study or not. To ensure anonymity, the participants were requested not to write their names on the questionnaires rather to use a code for identification purposes. The researcher ran a similarity index to check for plagiarism in order to maintain academic honesty. In all, ethical considerations guarded the researcher against deception, informed consent, privacy, confidentiality and accuracy. To reduce further psychological effects, the researcher through research assistants provided normal counselling services for the control group and serious cases in need of individualized care.

Table 3.2:**Summary of Data Analysis Methods**

Research Hypotheses	Independent Variable	Dependent Variable	Statistical method
H0 ₁ : There is no statistical significant effectiveness of Narrative Exposure Therapy Intervention in management of memory intrusion symptoms of traumatic stress among young people in Kakuma Division.	Narrative Exposure Therapy Intervention	Memory Intrusion Symptoms	t-Test
H0 ₂ : There is no statistical significant effectiveness of Narrative Exposure Therapy Intervention in management of avoidance of stimuli symptoms of traumatic stress among young people in Kakuma Division	Narrative Exposure Therapy Intervention	Avoidance of Stimuli Symptoms	t-Test
H0 ₃ : There is no statistical significant effectiveness of Narrative Exposure Therapy Intervention in management of negative alterations in cognitions and mood of traumatic stress among young people in Kakuma Division.	Narrative Exposure Therapy Intervention	Negative Alterations in Cognitions and Mood Symptoms	t-Test
H0 ₄ : There is no statistical significant effectiveness of Narrative Exposure Therapy Intervention in management of alterations in arousal and reactivity to external stimuli symptoms of traumatic stress among young people in Kakuma Division.	Narrative Exposure Therapy Intervention	Alterations in Arousal and Reactivity to External Stimuli Symptoms	t-Test

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

The chapter presents data analysis, presentation and interpretation of results. The study sought to establish the effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma Division, Turkana County in Kenya. This chapter also shows how analysis of respondents' demographic characteristics was done using descriptive statistics with frequencies and percentages and result presented using tables, pie charts and bar chart. Inferential statistics derived from PCL-5 questionnaire was analysed using a t-test to compare the means in the pre-test and post-test scores in order to establish statistical significant differences between the experimental and control groups. Results are presented using tables and the implications are discussed in sections. The first section presents the demographic characteristics of the respondents. The other sections are organized based on the objectives of the study.

4.2 Response Rates of the Study

The study involved respondents who were young people in Kakuma refugee camp. A total of 110 young people filled the questionnaires to participate in the study. Table 4.3 shows the response rate of the participants.

Table 4.3:
Response Rates of Participants

Category	Frequency	Percentage
Sample	110	100.0
Returned	104	94.5%

The study sampled 110 respondents. 104 of the sample size completed the questionnaire representing a response rate of 94.5%. Writing about response rate, Fincham (2008) suggested that researcher should aimed at an approximate of 60% of response rate. This study therefore met the threshold suggested by many authors.

4.3 Respondents' Demographic Characteristics

This section presents descriptive statistics on the respondents' age, gender, nationality, religion, frequencies of those who had received counselling and those who needed further counselling.

4.3.1 Age of Respondents

The study targeted young people within the age of 15 – 24. The respondents were categorized in age brackets of five years. Figure 4.2 presents the results.

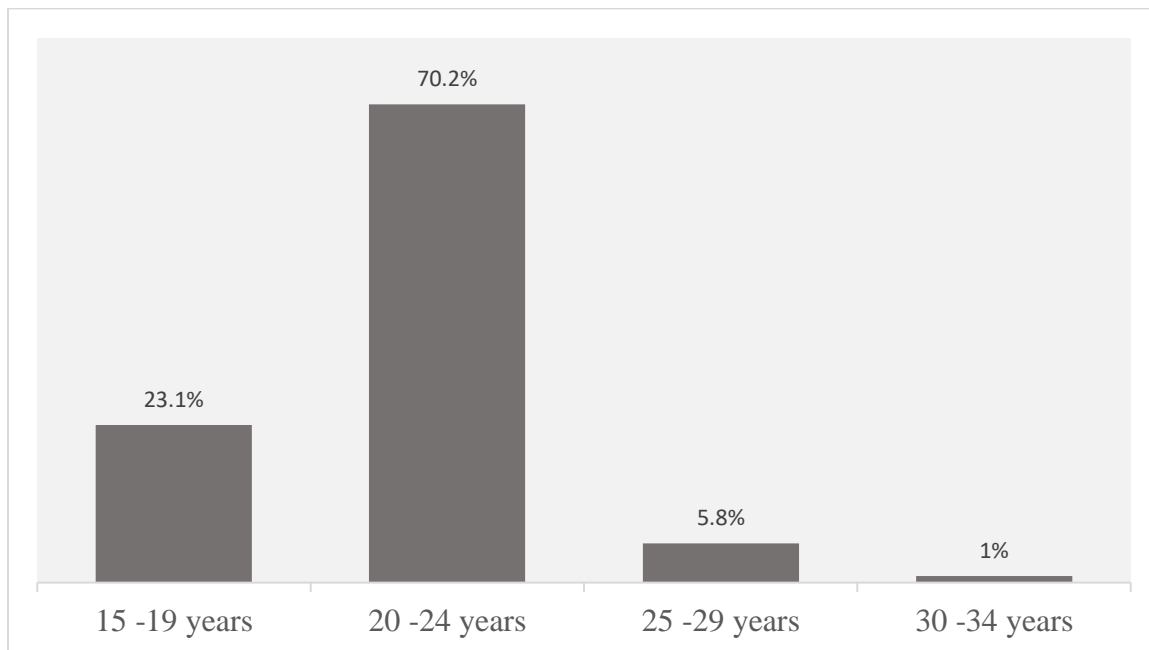


Figure 4. 2: Age of Respondents

The study sampled those in Form Three from the five Kakuma secondary schools. 73 (70.2%) of young people in Form Three in Kakuma refugee camp are aged between 20-24 years. 24 (23.1%) are aged between 15-19 years, 6 (5.8%) of them are between 25-29 years, while 1 (1%) are aged between 30-34 years old. The result implied that most of young people in Kakuma who participated in the study are aged 20-24 years

4.3.2 Gender of Respondents

The study involved both male and female respondents from Form Three in the five secondary schools in Kakuma. Figure 4.3 presents the result of respondents' gender.

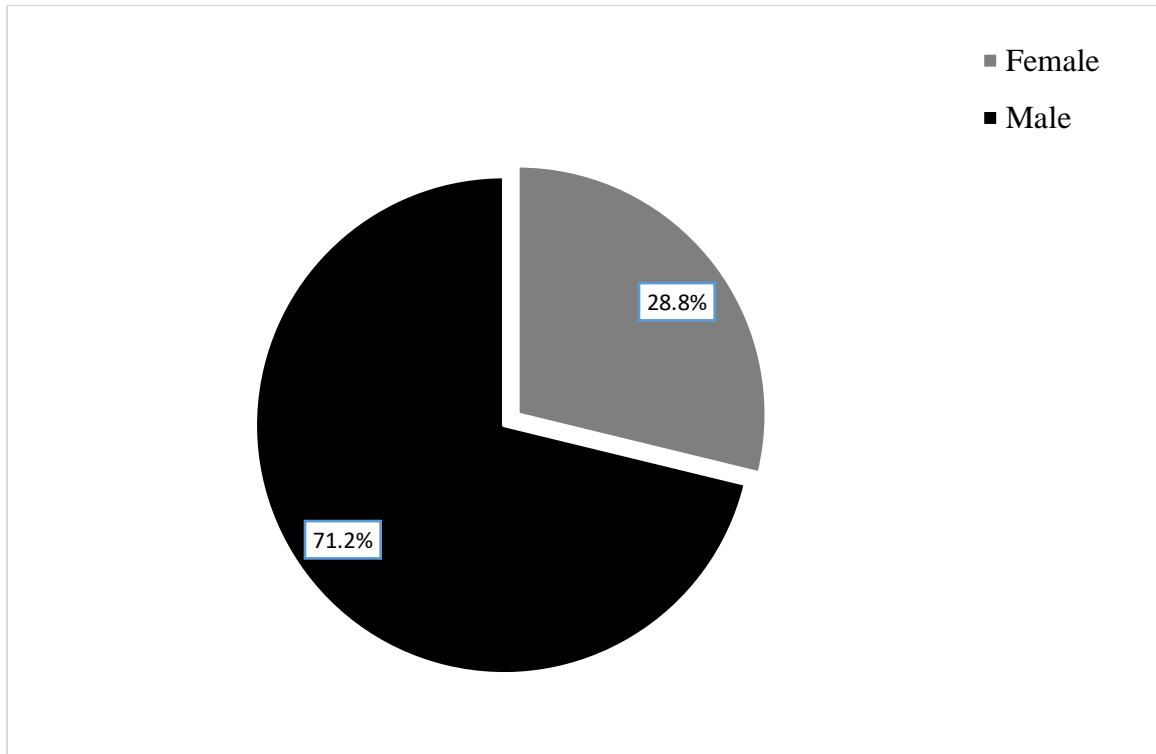


Figure 4.3: Gender of Respondents

From the results in Figure 4.2, 71.2% (74) of the respondents were males while 28.8% (30) of them were females. This implied that more male youth participated in the study than female.

4.3.3 Frequency of Respondents' Nationality

The researcher sought to establish the respondents' nationality. The results are presented in Table 4.4.

Table 4.4:
Frequency of Respondents' Nationality

Nationality	Frequency	Percent
Burundi	1	1.0
Congolese	4	3.8
Kenya	1	1.0
S. Sudan	56	53.8
Somalia	2	1.9
Sudan	39	37.5
Uganda	1	1.0
Total	104	100.0

From the results, out of 104 respondents who completed the questionnaire, 56 (53.8%) of the respondents were from South Sudan, 39 (37.5%) from Sudan. The other respondents' nationality were distributed as follows; 4 (3.8%) from Congo, 2 (1.9%) from Somalia, 1 (1%) from Burundi, 1 (1%) from Kenya and 1 (1%) from Uganda. The study showed that majority of young people in Kakuma refugee camp who took part in the study were South Sudanese.

4.3.4 Respondents' Religious Affiliation

The researcher went further to establish respondents' religious affiliation. Figure 4.4 presents the findings.

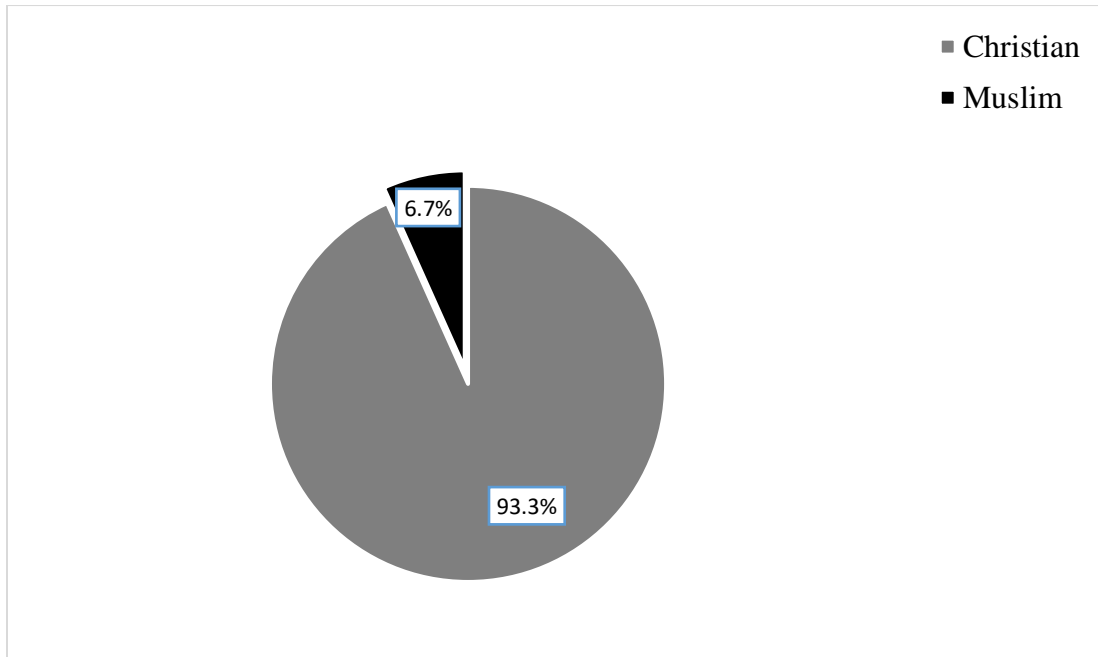


Figure 4.4: Respondents' Religious Affiliation

Findings from data collection revealed that out of 104 respondents, 97 of the respondents were Christian (93.3%), while 7 of them were Muslim (6.7%). None of the respondent had other form of religious affiliation. This study shows that the largest number of those who participated in the study were Christians.

4.3.5 Respondents who had Received Counselling Previously

The researcher sought to find out respondents who had previously received counselling services and the results are shown in Figure 4.5

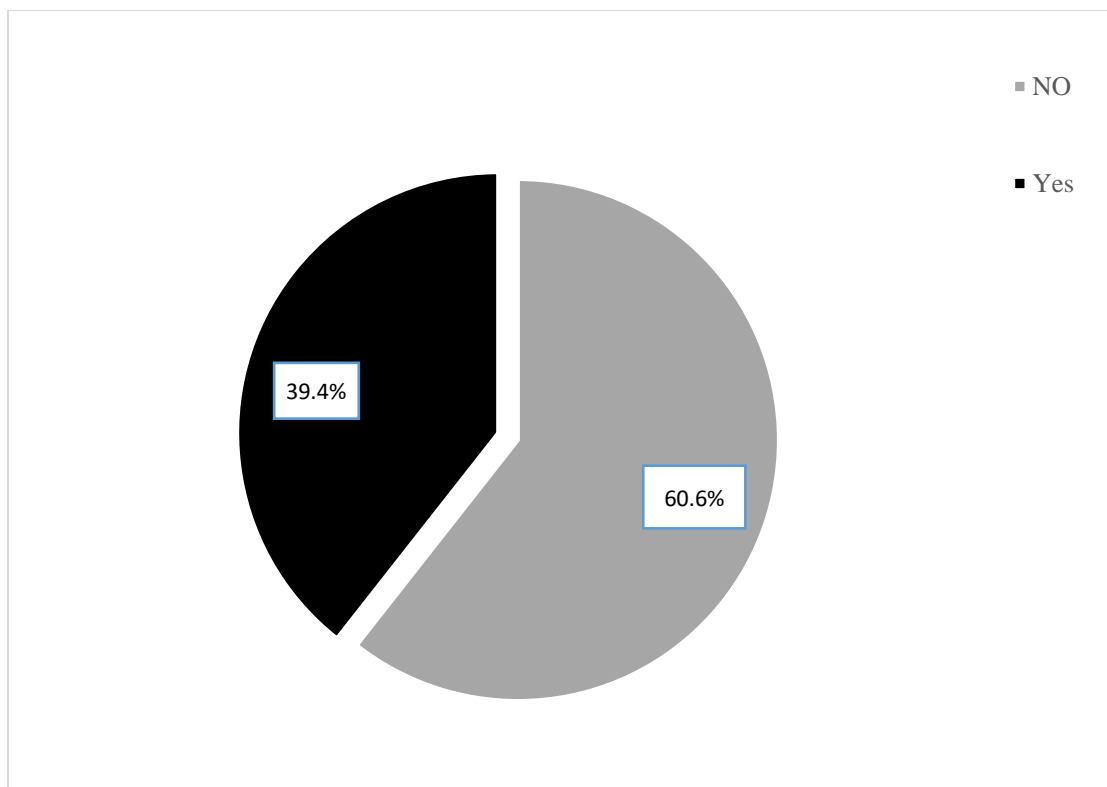


Figure 4.5: Respondents who had Received Counselling Previously

Data collection showed that the larger part of young people in Kakuma who participated in the study had not previously received counselling services. While 39.4% of them have received counselling previously, 60.6% of them had not received counselling services before. The results revealed that those who had not received counselling intervention after their experience of trauma could partly be due to lack of availability of counselling professionals to young people in the camp. Lack of evidence based counselling intervention services after an experience of traumatic event may complicate survivors' trauma experience or slow down their process of recovery thereby affecting their functioning. Respondents therefore needed trauma based counselling services to help them connect with themselves for proper psychological functioning. The researcher after establishing respondents who had received counselling services prior to the study went

further to find out respondents who needed further counselling. The next section presents the results.

4.3.6 Respondents who needed Further Counselling Services

The researcher sought to establish whether respondents who had received counselling services prior to the study needed further counselling. Figure 4.6 presents the findings.

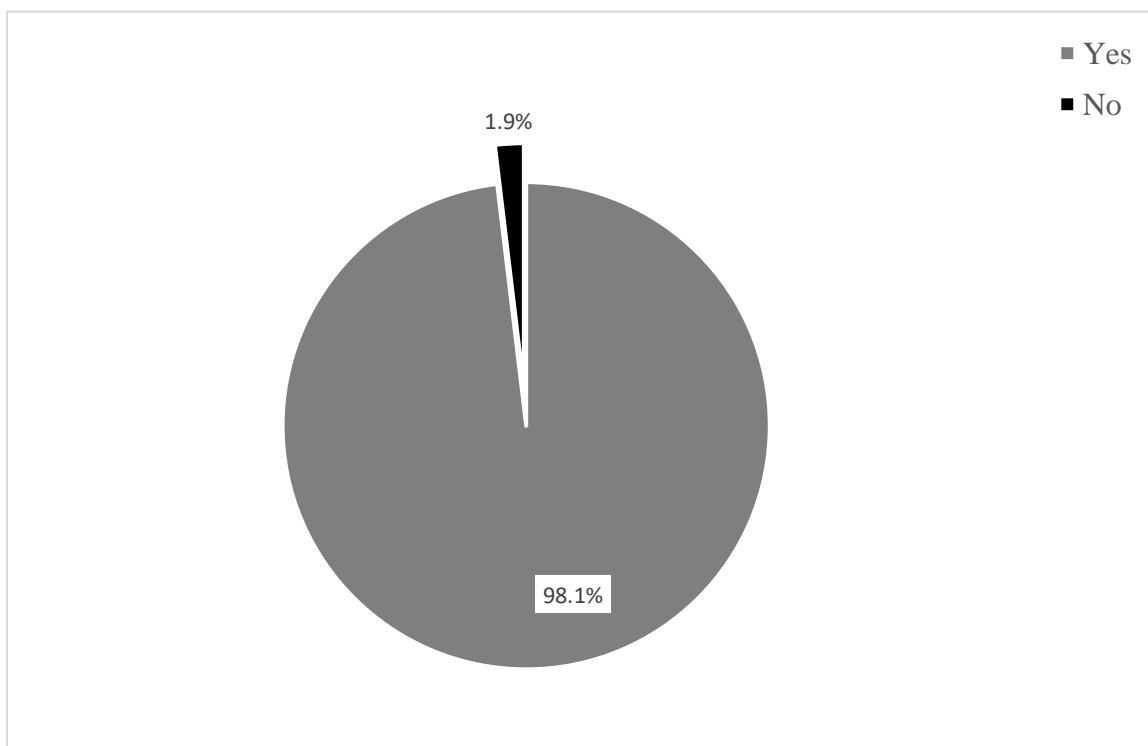


Figure 4.6: Respondents who needed Further Counselling Services

Findings from the study showed that out of the 104 respondents, 102 (98.1%) indicated that they needed further counselling while only 2 (1.9%) respondents felt that further counselling was not necessary. The findings implied that almost all respondents including those who had received counselling previously needed further counselling.

4.4 Pre-test and Post-test Results of the Study Objectives.

The independent sample t-test was employed to determine the statistical differences in the pre-test and post-test means of the experimental and control groups. The independent t-test which is also called two-sample t-test is basically used to test a statistical difference between the means of two groups or two interventions (Wagner, 2015). In this study, it is used to measure the means between experimental group and control group in each objective of the study to determine statistical significant differences. Before intervention, all the respondents were subjected to a pre-test to establish statistical differences between the experimental and control group. While respondents in experimental group received narrative exposure therapy intervention, those in the control received normal counselling. Respondents in both groups were subjected to a post-test at the end of the four (4) weeks intervention period of eight (8) therapy sessions. During analysis, memory intrusion symptoms, Avoidance of stimuli symptoms, negative alternation in cognitions and mood symptoms and alterations in arousal and reactivity to external stimuli symptoms were coded with the following: not at all (0), a little bit (1), moderately (2), quite a bit (3), and extremely (4). The researcher assessed whether there were differences in means of the pre-test and post-test results in the objectives of the study.

4.4.1 Effectiveness of Narrative Exposure Therapy Intervention and Management of Memory Intrusion Symptoms

The first objective of the study was to determine the effectiveness of the narrative exposure therapy intervention in management of memory intrusion symptoms among

young people in Kakuma Division. The objective has results from analysis of pre-test and post-test data.

4.4.1.1 Pre-test Results of Memory Intrusion Symptoms

The researcher assessed whether there were significant differences in the levels of memory intrusion symptoms between young people in the treatment group exposed to narrative exposure therapy intervention and those in the control group exposed to normal counselling. Table 4.5 presents the pre-test group statistics of memory intrusion symptoms.

Table 4.5:

Pre-test Group Statistics of Memory Intrusion Symptoms

	Control/ Treatment	N	Mean	Std. Deviation	Std. Error Mean
Memory Intrusion symptoms	Treatment	53	2.64	.834	.115
	Control	51	2.43	.806	.113

The results indicated that the mean memory intrusion symptoms among young people in the narrative exposure therapy intervention group was 2.64 with a standard deviation of 0.834, while the mean among those in the normal counselling group was 2.43 with a standard deviation of 0.806. This therefore means that there was a minimal mean difference of 0.21. Table 4.6 presents results on whether the reported mean difference was statistically significant.

Table 4.6:**Pre-test Independent Samples T-test Scores of Memory Intrusion Symptoms**

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Memory Intrusion symptoms	1.305	102	.195	.210	-.109	.529

The mean difference was 0.210 (95% CI = -0.109 to 0.529), $t(102) = 1.305$, $p = .195 > 0.05$. From the statistics, the independent t-test results showed that there was no statistically significant difference in memory intrusion symptoms between young people in the narrative exposure therapy group and those in the normal counselling group before intervention.

4.4.1.2 Post-test Results of Memory Intrusion Symptoms

A post-test was conducted after the intervention. The aim of the post-test was to examine whether there were significant differences in the levels of memory intrusion symptoms between young people exposed to the narrative exposure therapy and those exposed to normal counselling. Table 4.7 presents the post-test group statistics under memory intrusion symptoms objective.

Table 4.7:**Post-test Group Statistics of Memory Intrusion Symptoms**

	Control/ Treatment	N	Mean	Std. Deviation	Std. Error Mean
Memory	Treatment	53	1.19	.761	.105
Intrusion	Control	51	2.06	.705	.099

The post-test results indicated that the mean of memory intrusion symptoms among young people in the narrative exposure therapy group was 1.19 with a standard deviation of 0.761, while the mean among those in the normal counselling group was 2.06 with a standard deviation of 0.705. There was a mean difference of -0.87. An independent t-test was carried out. Table 4.8 presents the t-test results on whether the reported mean difference was statistically significant.

Table 4.8:**Post-test Independent Samples T-test Scores of Memory Intrusion Symptoms**

	t	df	Sig. (2- tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Memory Intrusion symptoms	- 6.045	102	.000	-.870	-1.156	-.585

From the report, the independent t-test showed memory intrusion symptoms being higher among young people who received normal counselling than those in the narrative exposure therapy intervention group. The mean difference was -0.870 (95% CI = -1.156 to -0.585), $t(102) = -6.045$, $p < 0.000$. The hypothesis stating that there is no significant effectiveness of narrative exposure therapy intervention in management of memory

intrusion symptoms of traumatic stress among young people in Kakuma division was rejected and the study concluded that there is statistical significant effectiveness of narrative exposure therapy intervention in management of memory intrusion symptoms of traumatic stress among young people in Kakuma Division.

4.4.2 Effectiveness of Narrative Exposure Therapy Intervention and Management of Avoidance of Stimuli Symptoms

An assessment of the effectiveness of the narrative exposure therapy intervention in management of avoidance of stimuli symptoms was conducted with pre-test and post-test results. This was the second objective of the study.

4.4.1 Pre-test Results of Avoidance of Stimuli Symptoms

Under the pre-test, the researcher assessed whether there were differences in levels of avoidance of stimuli symptoms between young people that were exposed to the narrative exposure therapy and those exposed to normal counselling before the intervention. Table 4.9 reports the findings.

Table 4.9:

Pre-test Group Statistics of Avoidance of Stimuli Symptoms

	Control/Treatment	N	Mean	Std. Deviation	Std. Error Mean
Avoidance of	Treatment	53	2.57	1.029	.141
Stimuli symptoms	Control	51	2.31	.860	.120

From the pre-test results, the mean avoidance of stimuli symptoms among young people in the narrative exposure therapy intervention group was 2.57 with a standard deviation of 1.029, while the mean among those in the normal counselling group was 2.31

with a standard deviation of 0.860. There was a mean difference of 0.252. Table 4.10 presents the results on whether the reported mean difference was statistically significant.

Table 4.10:

Pre-test Independent Samples T-test Scores of Avoidance of Stimuli Symptoms

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Avoidance of stimuli Symptoms	1.354	102	.179	.252	-.117	.622

The mean difference was 0.252 (95% CI = -0.117 to 0.622), $t(102) = 1.35$, $p = .179 > 0.05$. The independent samples t-test results therefore showed that there was no statistically significant difference in avoidance of stimuli symptoms between young people in the narrative exposure therapy intervention group and those in the normal counselling group before intervention.

4.4.2 Post-test Results of Voidance of Stimuli Symptoms

The researcher went further to assess if there were differences in the means of avoidance of stimuli symptoms between young people exposed to the narrative exposure therapy and those exposed to normal counselling after the intervention. The means results of the post-test are shown in Table 4.11

Table 4.11:**Post-test Group Statistics of Avoidance of Stimuli Symptoms**

	Control/ Treatment	N	Mean	Std. Deviation	Std. Error Mean
Avoidance of stimuli symptoms	Treatment	53	1.64	1.111	.153
	Control	51	2.14	.849	.119

The results indicated that the mean of avoidance of stimuli symptoms among young people in the narrative exposure therapy intervention group was 1.64 with a standard deviation of 1.111, while the mean among those in the normal counselling group was 2.14 with a standard deviation of 0.849. Therefore, there was a mean difference of -0.496. Table 4.12 presents results on whether the reported mean difference is statistically significant.

Table 4.12:**Post-test Independent Samples T-test Scores of Avoidance of Stimuli Symptoms**

	t	df	Sig. (2- tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Avoidance of stimuli Symptoms	- 2.550	102	.012	-.496	-.881	-.110

The independent samples t-test results from Table 4.12 shows that avoidance of stimuli symptoms were higher among young people that were exposed to normal counselling. The mean difference was -0.496 (95% CI = -0.881 to -0.110), $t(102) = -2.550$, $p = 0.12 < 0.05$. There is therefore significant evidence to reject the null hypothesis and conclude that there is statistical significant effectiveness of narrative exposure therapy intervention in management of avoidance of stimuli symptoms of traumatic stress among

young people in Kakuma division. The researcher after establishing the effectiveness of narrative exposure therapy intervention in management of avoidance of stimuli symptoms of traumatic stress among young people went further to test negative alternations in cognitions and mood symptoms of traumatic stress.

4.4.3 Effectiveness of Narrative Exposure Therapy Intervention in Management of Negative Alterations in Cognitions and Mood Symptoms

The third objective of the study was an assessment of the effectiveness of the narrative exposure therapy intervention in management of negative alterations in cognitions and mood symptoms. The pre-test was conducted to determine any significant difference between the two groups.

4.3.3.1 Pre-test Results of the Negative Alterations in Cognitions and Mood Symptoms

Under this sub-section, the researcher assessed whether there were differences in the levels of negative alterations in cognitions and mood symptoms between young people that were exposed to the narrative exposure therapy and those exposed to normal counselling before the intervention. Table 4.13 has the results of the group scores.

Table 4.13:

Pre-test Group Statistics of Negative Alterations in Cognitions and Mood Symptoms

	Control/ Treatment	N	Mean	Std. Deviation	Std. Error Mean
Negative alterations in cognitions and mood symptoms	Treatment	53	2.38	.740	.102
	Control	51	2.25	.771	.108

From the results, the mean negative alterations in cognitions and mood symptoms among young people in the narrative exposure therapy group was 2.38 with a standard deviation of 0.740, while the mean among those in the normal counselling group was 2.25 with a standard deviation of 0.771. The results showed the mean difference of 0.122. Table 4.14 presents the results on whether the reported mean difference was statistically significant.

Table 4.14:

Pre-test Independent Samples T-test Scores of Negative Alteration in Cognitions and Mood Symptoms

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Negative alterations in cognitions and mood symptoms	.827	102	.410	.122	-.171	.416

The independent samples t-test results showed that there was no statistically significant difference in negative alterations in cognitions and mood symptoms between young people in the narrative exposure therapy group and those in the normal counselling group before intervention. The mean difference was 0.122 (95% CI = -0.171 to 0.416), $t(102) = 0.827, p = .410 > 0.05$.

4.4.3.2 Post-test Results of Negative Alterations in Cognitions and Mood Symptoms

The researcher assessed whether there were differences in levels of negative alterations in cognitions and mood symptoms between young people who received narrative exposure therapy intervention in the treatment group and those who received

normal counselling in the control group after the intervention. Table 4.15 shows the post-test mean results.

Table 4.15:

Post-test Group Statistics of Negative Alterations in Cognitions and Mood Symptoms

	Control/ Treatment	N	Mean	Std. Deviation	Std. Error Mean
Negative alterations in cognitions and mood symptoms	Treatment	53	.79	.743	.102
	Control	51	2.10	.539	.075

The results indicated that the mean negative alterations in cognitions and mood symptoms among young people in the treatment group narrative exposure therapy was 0.79 with a standard deviation of 0.743, while the mean among those in the normal counselling group was 2.10 with a standard deviation of 0.539. Therefore, there was a mean difference of -1.306. Table 4.16 presents the results on whether the reported mean difference is statistically significant.

Table 4.16:

Post-test Independent Samples T-test Scores of Negative Alterations in Cognitions and Mood Symptoms

	t	df	Sig. (2- tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Negative alterations in cognitions and mood symptoms	-10.224	102	.000	-1.306	-1.559	-1.052

From the findings on Table 4.16, the independent samples t-test results confirmed that negative alterations in cognitions and mood symptoms were higher among young people that were exposed to normal counselling. The mean difference was -1.306 (95% CI = -1.559 to -1.052), $t(102) = -10.224$, $p = < 0.00$. Therefore the hypothesis that stated that there is no significant statistical effectiveness of narrative exposure therapy in the management of negative alterations in cognitions and mood of traumatic stress among young people in Kakuma division was rejected in favour of the alternative hypothesis. The researcher went further to test the next hypothesis.

4.4.4 Effectiveness of Narrative Exposure Therapy Intervention in Management of Alterations in Arousal and Reactivity to External Stimuli Symptoms

This section presents an assessment of the last objective of the study which was on the effectiveness of the narrative exposure therapy intervention in management of alterations in arousal and reactivity to external stimuli symptoms. The section has subsections on analysis and presentation of baseline and endline data.

4.4.4.1 Pre-test Results of Alterations in Arousal and Reactivity to External Stimuli Symptoms

The researcher assessed whether there were differences in levels of alterations in arousal and reactivity to external stimuli symptoms between young people in the treatment group who were exposed to narrative exposure therapy intervention and those in control group who received normal counselling intervention. Table 4.17 presents the pre-test group statistics.

Table 4.17:**Pre-test Group Statistics of Alterations in Arousal and Reactivity to External Stimuli****Symptoms**

	Control/ Treatment	N	Mean	Std. Deviation	Std. Error Mean
Alteration in arousal and reactivity to external stimuli symptoms	Treatment	53	2.19	.810	.111
	Control	51	1.84	.703	.099

The findings revealed the mean alterations in arousal and reactivity to external stimuli symptoms among young people in the narrative exposure therapy intervention group was 2.19 with a standard deviation of 0.703, while the mean among those in the normal counselling group was 1.84 with a standard deviation of 0.703. Therefore, there was a mean difference of 0.346. Table 4.18 has the results on whether the reported mean difference is statistically significant or not.

Table 4.18:**Pre-test Independent Samples T-test Scores of Alterations in Arousal and Reactivity to External Stimuli Symptoms**

	t	df	Sig. (2- tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Alteration in arousal and reactivity to external stimuli symptoms	2.319	102	.022	.346	.050	.641

The independent samples t-test results showed that there was a statistical significant difference in alterations in arousal and reactivity to external stimuli symptoms between young people in the narrative exposure therapy group and those in the normal counselling group before intervention. The mean difference was 0.346 (95% CI = 0.050 to 0.641), $t(102) = 2.319, p = .022 < 0.05$.

4.4.4.2 Post-test Results of Alterations in Arousal and Reactivity to External Stimuli Symptoms

The researcher assessed whether there were differences in levels of alterations in arousal and reactivity to external stimuli symptoms between young people exposed to the narrative exposure therapy and those exposed to normal counselling after the intervention. Table 4. 19 present the group statistics.

Table 4.19:

Post-Test Group Statistics of Alterations in Arousal and Reactivity to External Stimuli Symptoms

	Control/ Treatment	N	Mean	Std. Deviation	Std. Error Mean
Alteration in arousal and reactivity to external stimuli	Treatment	52	1.02	.610	.085
	Control	51	1.75	.627	.088

The results indicated that the mean negative arousal and reactivity to external symptoms among young people in the narrative exposure therapy group was 1.02 with a standard deviation of 0.610, while the mean among those in the normal counselling group was 1.75 with a standard deviation of 0.627. Therefore, there was a mean difference of -

0.726. Table 4.20 presents the results on whether the reported mean difference was statistically significant.

Table 4.20:

Post-test Independent Samples T-test Scores of Alterations in Arousal and Reactivity to External Stimuli Symptom

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Alteration in arousal and reactivity to external stimuli symptoms	-5.953	102	.000	-.726	-.968	-.484

The independent samples t-test results confirmed that alterations in arousal and reactivity to external stimuli symptoms were higher among young people that were exposed to normal counselling. The mean difference was -0.726 (95% CI = -0.968 to -0.484), $t(102) = -5.953$, $p = < 0.00$. The difference in means was higher after the intervention. There was therefore a mean evidence to reject the null hypothesis in favour of the alternative hypothesis and conclude that there is statistical significant effectiveness of narrative exposure therapy intervention in management of alterations in arousal and reactivity to external stimuli symptoms of traumatic stress among young people in Kakuma division.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMENDATIONS

5.1 Introduction

This chapter presents a discussion of the main findings based on the study objectives and hypotheses, conclusions and recommendations derived from the results of the study. The study implications are discussed and suggestions made on possible areas for further research.

5.2 Discussions

The focus of the study was on assessment of the effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma division, Turkana County of Kenya. From the objectives, the study focused on memory intrusion symptoms of traumatic stress, avoidance of stimuli symptoms of traumatic stress, negative alteration in cognitions and mood symptoms of traumatic stress and alteration in arousal and reactivity to external stimuli of traumatic stress. The study was an experimental study that adopted quasi-experimental design involving a treatment group and a study group. While the treatment group received narrative exposure therapy intervention, the control group received normal counselling.

From the demographic findings of the study, majority of the young people in Form three in Kakuma who participated in the study were between 20-24 years of age. This is different from young people in Form three in the host country of Kenya who are within the age bracket of 16-18 years in the same class. The delay in school years among young people in Kakuma may be attributed to war and conflict in their home country and community.

The larger parts of the young people in the study were males (71.2%) while the females formed 28.8%. The reason for the difference in gender population is that more males than females arrive in Kakuma refugee camp every year following the initial purpose for which the camp was established in 1992 for the “lost boys of Sudan” (UNHCR, 2020). However, it does not imply that more males than females get traumatized. On the contrary, a study on gender difference in relation to traumatic stress disorder and war-related trauma was conducted by Ainamani, Elbert, Olema and Hecker (2020) among Congolese refugees living in Nkivale refugee settlement in Uganda. The study revealed that more women (93.8%) than men (83.7%) presented with traumatic stress.

While the majority of those who took part in the study were from South Sudan, the least number came from Kenya, Burundi and Uganda. The reason for the highest number of South Sudanese in Kakuma refugee camp and in this study could partly be due to the proximity of the camp and the border town of Kenya and South-Sudan. Repeated incidences of organized war in their home country cause movement of people from South Sudan to Kenya. According to UNHCR (2016), Silove, Ventevogel and Rees (2017), in 2016 alone, persons displaced from their homeland were a total of 3.2 million. Syria and South Sudan were the leading source countries. It was also found out that the respondents were either Christians (93.3%) or Muslims (6.7%). None came from other faith backgrounds. This however, reflects the two main religions practiced by many in Africa.

Furthermore, a greater number of young people in Kakuma have not previously received counselling services and most of them indicated that they needed counselling services. The reasons most of the refugees in Kakuma have not received counselling services may be partly due to what Goss and Adebawale (2014) observed. According to

them, the reasons range from availability of counselling facilities to cultural influences. The former may be the major setback in the reception of counselling services among Kakuma refugees, hence the need for counselling and psychological services to be made accessible as proposed by Turrini et al. (2019). The following section discusses the findings according to the objectives of the study.

5.2.1 Narrative Exposure Therapy Intervention and Management of Memory

Intrusion Symptoms

The first objective of the study was to determine the effectiveness of narrative exposure therapy intervention in the management of memory intrusion symptoms of traumatic stress among young people in Kakuma division. The study findings revealed that memory intrusion symptoms were higher among young people that were exposed to normal counselling as compared to those exposed to the narrative exposure therapy intervention. The therapy intervention was therefore effective in management of memory intrusion symptoms of traumatic stress among young people in Kakuma division with a mean difference of 0.870 and a p -value of 0.000 ($p < 0.001$).

This study confirmed a study by Kessler et al. (2018) on reducing intrusive memories of trauma using a visuospatial interference intervention with inpatients with post-traumatic stress disorder (PTSD). Twenty (20) participants took part in the study. Sixteen (16) of them met the criteria for showing “response” to the intervention. The results of the study showed that frequency of targeted intrusion symptoms reduced by an average of 64% from baseline to the post intervention phase. On the contrary, never targeted intrusions reduced in frequency by on average 11% over a comparable time-period. Equally, the study confirmed the previous narrative exposure therapy intervention

carried out by Hensel-Dittmann et al. (2011) with asylum seekers in Germany with demonstrated significant reduction in traumatic stress symptoms. Therefore the hypothesis that stated that effectiveness of narrative exposure therapy intervention in management of memory intrusion symptoms of traumatic stress among young people in Kakuma division is not statically significant was rejected in favour of the alternative hypothesis.

Persons with memory intrusion symptoms suffer a range of psychological distress which manifests in forms of repeated, distressing and unwanted memories of the traumatic experience. They equally suffer sleep disturbances in form of nightmares and dissociative reactions in form of flashbacks whereby an individual feels the traumatic events were in reality happening again. These are constitutive elements of this cluster symptoms. DSM-5 (APA, 2013) has it that the presence of one or more of these symptoms in an individual who has experienced a traumatic event endorses post-traumatic stress disorder diagnosis. In ameliorating and mitigating symptoms of traumatic stress, depression and anxiety, Nickerson, Bryant, Silove, and Steel (2011) averred that the mainstay of treatment and management of mental disorders among refugees and asylum seekers remains counselling and psychotherapy.

In addition to past traumatic effects, refugees are confronted with severe human conditions in their new environment. These include ongoing insecurity, access to mental health, educational services and host society attitudes of hostility. The consequent effect is that refugees do not have the support of nuclear family or extended family or other support traditional to them. Against these backdrops Silove, Ventevogel, and Rees (2017) maintained that social programmes for refugees as adjunct services to psychotherapy have the capacity to improve in them a sense of connection and promotion of self-help activities.

In addressing mental health challenges resulting from trauma and other life events, Bickman (2020) is of the opinion that mental health service can be improved if evidence based service are made available. According to the findings, fewer clients are exposed to effective evidence-based interventions that are sufficiently qualitative. Those who administer evidence-based mental health services at time do not do so with utmost commitment. Consequently as observed by Costello et al. (2014), more than 60% of youth populations suffering mental health challenges like major depressive disorder do not receive interventions that aimed at reducing their distress. The situation becomes alarming when it comes to low and middle income countries like Kenya and other African countries. Esponda et al. (2020) observes that in this low income countries, mental health interventions become severely limited. Kakuma refugee population belongs to this group of individual across the world with challenges accessing basic human needs. As Hodgkinson (2017), puts it, less than 15% of those in the margin of the society receive needed mental health support.

As dual representation theory (DRT) of Brewin, Dalgleish and Joseph (1996) has it, that memories of traumatic event are only access when there are triggers of the original experience. Trauma survivors avoid coming in contact with cues of their past traumas which may include people, places or events due to strong physical reactions associated with being reminded of the painful experience. These reactions sometimes include strong heart pounding, trouble breathing, sweating and other unwanted somatic reactions. Survivors may also try to avoid the therapeutic process due to labelling or stigmatization or when they are not sure of the outcome. This is why Schaurer et al. (2011) incorporate psycho-education in the beginning of the therapeutic process in NET intervention. Here trauma

survivors are prepared with the help of the therapist to embark on a journey of remembering the painful experience for the purpose of healing and integration of fragmented trauma memories into a holistic narration.

5.2.2 Narrative Exposure Therapy Intervention and Management of Avoidance of Stimuli Symptoms

A study by Hendin (2014) found out that narrative exposure therapy treatment successfully reduced symptoms of post-traumatic stress disorder, using a short term 12-session treatment approach targeting symptoms of PTSD in combat veterans. From the findings of the present study, avoidance of stimuli symptoms were higher among young people that were exposed to normal counselling as compared to those exposed to the narrative exposure therapy. The baseline mean difference of avoidance symptoms was 0.252 while the post-test mean difference was -0.496 with p-value of 0.012 ($p < 0.05$). The outcome of the study showed a significant reduction of avoidance of stimuli symptoms of traumatic stress indicating an effectiveness of the narrative exposure therapy intervention in management of avoidance of stimuli symptoms of traumatic stress among young people in Kakuma division. Consequently, the null hypothesis that stated that there is no statistical significant effectiveness of narrative exposure therapy intervention in management of avoidance stimuli symptoms of traumatic stress among young people in Kakuma division was rejected.

The findings in this study confirmed the effectiveness of NET. It equally agreed with the first trial of this intervention in Africa that was carried out by Neuner, Schauer, Klaschik, Karunakara and Elbert (2004) among 43 Sudanese refugees with a significant PTSD symptoms reduction following an experience of war. Further, it affirmed a study by

Atulomah, Dangana, Olanrewaju, and Oritogun, (2020) that sampled 40 participants from two IDPs in Nigeria through purposeful sampling. The participants were assigned to motivational counseling and a control group. Descriptive and inferential statistics were used to analyse the data ($p < 0.05$). Results showed that at baseline, traumatic stress symptoms between the treatment group and control group was 3.50 ± 0.60 and 3.75 ± 0.69 respectively. Post-test values of traumatic stress symptoms dropped for the treatment group (2.60 ± 0.60) and not for control group (3.75 ± 0.44). At 13th week follow-up, the treatment group demonstrated higher scores of traumatic stress symptom-reduction, (83.45 ± 5.77 an aggregate of 15.79%) compared to the control group.

Avoidance of stimuli symptoms of traumatic stress as expounded by APA (2013), begins after the traumatic event has occurred and is evidenced by an attempt to prevent cognitions or feeling associated with the traumatic experience. It is evidenced equally by avoidance or an effort to avoid conversations, activities, places, people, objects or situations (Weathers et al., 2013). The effort to avoid reactivation of distressing and unwanted remembrance of traumatic experience is basically due to fear of being back to the scene and feeling the pains once again. It was against this backdrop of addressing the fear structure among traumatized persons that Foa and Kozak (1986) developed a theory called fear/trauma theory. The theory is also called emotional processing theory (EPT) or information process theory (IPT). The foundation of this theory by Foa and Kozak was based on Peter Lang's (1979) bio-informational theory of fear in which fear is viewed as a cognitive structure that serves as a programme for avoiding or escaping danger or distress.

Avoidance symptom is a fear structure that associates stimulus with past experiences. For instance, a trauma survivor in war-related trauma may associate the sight

or sound of a gun with past experience of trauma. This may trigger various behavioural and physiological reactions as response which may include running away or hiding. However, the associations of this different elements do not reflect the real situations but for the traumatized person, they are real. Avoidance of stimuli symptoms of traumatic stress is addressed through behavioural or cognitive techniques (Corey, 2013).

In advancing psychological health among refugees and displaced youths, Logie et al. (2020) sampled 445 young urban refugees and displaced youths in Kampala, Uganda. Women were 333 and men 112 in number. The findings revealed high level of depression among refugee urban dwellers and displaced youths. (73.9% vs. 49.1%). The study recommended an increased social support networks with potentials for promoting mental health among urban refugees and displaced youth. Trauma survivors have difficulties with autobiographical memory, they are unable to place the fear of the events appropriately in time and space and to clearly position them in a lifetime period. This and the avoidance of activating fear/trauma structure make it difficult for trauma survivors to narrate their traumatic experience in a logical and meaning presentation (Neuner, 2012). The therapist through empathic understanding helps clients in narrative exposure to undergo the process of addressing avoidance symptoms by activating the hot memories of their traumatic experience in a clinical environment to bring about healing.

5.2.3 Narrative Exposure Therapy Intervention in Management of Negative

Alterations in Cognitions and Mood Symptoms

The third objective of this study was to assess the effectiveness of narrative exposure therapy intervention in management of alterations in cognitions and mood symptoms of traumatic stress among young people in Kakuma division. Findings of this

study revealed that negative alterations in cognitions and mood symptoms were higher among young people that were exposed to normal counselling compared to those exposed to narrative exposure therapy. Therefore, narrative exposure therapy intervention was effective in management of negative alterations in cognitions and mood symptoms of traumatic stress among young people in Kakuma Division. The hypothesis that stated that effectiveness of narrative exposure therapy intervention in management of alterations in cognitions and mood of traumatic stress among young people in Kakuma division is not statically significant was equally rejected.

According to the third symptoms cluster of DSM-5 traumatic stress symptoms criteria (APA, 2013), an individual diagnosed with traumatic stress shows persistent negative thoughts and emotions about self, others and the surroundings. The negative self-perception leads to loss of interest in activities previously enjoyed. Equally the presence of dissociation outside other physical injury or drugs use causes inability in traumatized persons to remember important aspects of their life experience. This negative approach to life makes them stuck and unable to move forward because of pessimistic view. Effective trauma-based interventions reduce negative perception and improve individual functioning.

The effect of trauma on cognitive functioning has been captured in many studies especially in the area of neuropsychology (Hans, 2011). There is an undisputable interaction between trauma and brain functioning. The hippocampus area of the brain is undeniably sensitive to the effect of stress (Bremner, 2006). In addition to diseases like Alzheimer and other pathophysiological factors causing neuro-degeneration, trauma affects brain functioning with diminished memory performance (Kalat, 2019). In the same vein, post-

traumatic amnesia (PTA) and impaired capacity to recall certain events have been associated with traumatic experience (Gold, 2015). Accordingly, a longer period of post-traumatic memory loss signifies a serious cognitive deficiency. As Boeree (2009) postulated, trauma affects to a larger extent the emotional nervous system which is made up of the limbic system and the autonomic nervous system. The implication of this effect results in a loss of body homeostasis and dysfunctional memory presentation. The brain areas that are usually highly affected by traumatic stress include the functioning of amygdala, hippocampus and prefrontal cortex (Rubin de Celis et al., 2016). The submission against this findings in brain functioning and traumatic experience is that if effective intervention is not administered, traumatic stress can result in lifelong brain impairment and mental health challenges. In this regard, trauma-focused cognitive behavioural therapy (TF-CBT) has been found to target this symptom cluster of traumatic stress.

Akbarian et al., (2015) confirmed this through a study which found out that TF-CBT addresses faulty cognitive schemas and mood disturbances. The study showed that a highly standardized TF-CBT programmes significantly reduced symptoms of disorders and enhanced memory functioning among clients diagnosed with PTSD as compared to a control condition treated pharmacologically only. The study sampled 40 respondents who endorsed traumatic stress symptoms with an average age of 31.64 years, 78.6% of them were female. The respondents were randomly assigned to an intervention group or control condition. The intervention consisted of ten group sessions of TF-CBT of 60-90 minute session per week. At 10 week period, the results showed a reduction of symptoms of traumatic stress, depression and anxiety. Much improvement was recorded on memory

performance. The study concluded that TF-CBT enhanced traumatic stress symptoms management and autobiographical memory performance.

In a meta-analysis and systematic review study on the efficacy of psychosocial interventions, Turrini et al. (2019) sampled 1959 participants in 26 studies. Randomized controlled trials (RCTs) meta-analysis revealed that psychosocial interventions have beneficial significant clinical effectiveness on traumatic stress, depression and anxiety with standardized mean difference (SMD) of -0.71, -1.02, and -1.05 respectively. Post-migration stressor was assessed and found that the clinical beneficial effectiveness was maintained at one month or more. The study concluded that psychosocial interventions with trauma-focused and evidence based supported interventions with cognitive behavioural therapy components should be routinely made accessible to refugees and asylum seekers as part of health care systems for distressed individuals.

Purgato et al. (2018) on the management of trauma-related disorders using psychological therapies in low and middle income countries supported the already mentioned position. The study sampled 3523 participants who were affected by humanitarian crisis from sub-Saharan Africa, the Middle East, North Africa and Asia. In 36 studies, the study adopted an experimental designs in measuring the efficacy and suitability of psychological interventions with control conditions involving psychological placebo, wait list, treatment as usual, no treatment at all and attention placebo. The study applied psychological treatments to people with traumatic stress, major depressive, anxiety and related disorders. The results of treatments showed traumatic stress symptoms reduction compared to control condition with standardized mean difference (SMD) of -1.07. At one to four months SMD was -0.49 and at six months SMD was -0.37. Depressive

symptoms reduction was recorded accordingly with SMD of -0.86. At one to four month, SMD was -0.42 while anxiety symptoms was SMD -0.74 and at one to four months -0.53. The study recorded evidence of psychological therapies effectiveness on reduction of traumatic stress symptoms, depressive symptoms and anxiety symptoms in adult population living in humanitarian crisis setting.

The present study affirmed the recommendations of NET by Fazel et al. (2020) for management of post-traumatic stress disorder among children and adolescents. The study is also in line with the previous experiment of NET with Ugandan and Somalia refugees by Neuner et.al (2008). This study also supported the previous findings of Cohen, Mannarino, Jankowski, Rosenberg, Kodya, and Wolford (2016) on adjusted teens in residential treatment services using trauma-focused cognitive behavioural therapy with effectiveness in reducing trauma symptoms and enhancing mental function performance among young people.

5.2.4 Narrative Exposure Therapy Intervention in Management of Alterations in Arousal and Reactivity to External Stimuli Symptoms

The findings of the fourth objective of the study showed that alterations in arousal and reactivity to external stimuli symptoms were higher among young people that were exposed to normal counselling, compared to those exposed to the narrative exposure therapy intervention. This confirmed the effectiveness of narrative exposure therapy intervention in management of alterations in arousal and reactivity to external stimuli symptoms of traumatic stress among young people in Kakuma division.

The findings were in line with a study by Crawford et al. (2019) on war Veterans targeting hyper-arousal symptoms through the use of Mantram Repetition Programme

(MRP) for traumatic stress. The average age of the participants in the study was 48.90 with a standard deviation of 14.54. The treatment was delivered in eight weekly at 60 minutes session. There was a reduction in all symptom clusters of traumatic stress. MRP facilitated a significant reduction in hyper-arousal and hyper-vigilance to external stimuli at post-test with Hedge's $g = 0.57$. Hyper-arousal was $g = .52$ at follow-up. Numbing was $g = 0.47$ at post-treatment. The study concluded that hyper-arousal facilitated post-traumatic stress reductions in the other symptom clusters of traumatic stress.

Furthermore, on another study targeting the fourth symptoms cluster among refugees with traumatic stress disorder, Sandahl, Vindbjerg and Carlsson (2017) carried out two studies on sleep disturbance treatment. Sleep disturbance as a symptom comes with challenges like trouble falling asleep, staying asleep or restless sleep. In one of the studies 752 refugees meeting the criteria for traumatic stress filled the questionnaire to participate in the study. Those who stated sleep difficulties constituted 99.1%, while 98.7% mentioned recurring and distressing dreams. The study indicated disturbance in sleep is a prominent part of traumatic stress symptoms among refugees and recommended further research on sleep disturbance among refugees affected by traumatic stress.

Individual who suffer the fourth cluster symptoms of traumatic stress according to DSM-5 are hyper alert with startle behaviour and reactivity. They are confronted with hyper-arousal and hyper-vigilance. This leads to lack of concentration, angry outburst or acting aggressively (Weathers et al., 2013). The current study recorded a reduction on this symptom cluster with a mean difference of -0.726 and a p -value of 0.00 ($p < 0.01$), leading to the null hypothesis that stated that there is no statistical significant effectiveness of narrative exposure therapy intervention in management of alterations in arousal and

reactivity to external stimuli of traumatic stress among young people in Kakuma division being rejected.

The study findings affirmed the previous study done by Schaal, Elbert and Neuner (2009) among Rwandan orphans with a sustained results of traumatic symptoms reduction. It is also in line with a study done by Im, et al. (2018) in Kenya among Somali refugee youths living in urban settings. The study found out that trauma-informed psycho-education intervention is effective in addressing high mental health and psychosocial needs of refugees in low resource setting. Refugee youths from Somalia (n= 141) living in Nairobi received 12 therapy sessions of trauma-focused psycho-education. Pre-tests and post-tests were carried out. The results revealed that the interventions had positive effects on symptoms of traumatic stress. Participants recorded significant level of reduction in stress symptoms and increased level of social support. Individual with moderate symptoms of traumatic stress showed an increased in self-awareness. Through psycho-education, as Frankl (2012) maintained, the way traumatic experience is handled can be a catalyst of growth, transforming past traumatic wounds into wisdom.

The current study equally agreed with other psychological and trauma-based interventions like EMDR among refugee population. According to the study among Syrian refugees by Acarturk et al. (2015), 29 adult refugee with traumatic stress and depression symptoms were randomized into treatment group (n =15) using EMDR and control (n =14). Analysis of covariance results showed treatment group trauma stress and depression symptoms reduction ($d =1.78$, 95% CI: 0.92-2.64; $d =1.14$, 95% CI: 0.35-1.92) compared with wait-list control group. The study indicated that EMDR may be effective in traumatic stress and depression symptoms management.

With narrative exposure therapy, clients are able to alter the relationships between the fear stimulus and associative networks through activation of the fear network. In this process, new information are encoded that is incompatible with what is in the fear network whereby for the traumatized individual, the sight of a fear stimulus in a new environment would not mean another traumatic event. This is achieved when clients in a therapeutic relationship keep narrating their story until habituation is attained. In other words an individual remains in contact with activation until no further anxiety is recorded (Schaurer et al., 2011). With this clients' level of hyper-arousal and hyper-vigilance is significantly reduced.

5.3 Summary of Main Findings

The study assessed the effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma division, Turkana County. The results indicated that experimental group had higher scores than control group in memory intrusion symptoms, avoidance of stimuli symptoms, negative alterations in cognitions and mood symptoms and alterations in arousal and reactivity to external stimuli symptoms of traumatic stress.

The hypothesis that stated that there is no statistical significant effectiveness of narrative exposure therapy intervention in management of memory intrusion symptoms of traumatic stress among young people in Kakuma division was rejected. The hypothesis that stated that there is no statistical significant effectiveness of narrative exposure therapy intervention in management of avoidance of stimuli symptoms of traumatic stress among young people in Kakuma division was rejected. The hypothesis that stated that there is no statistical significant effectiveness of narrative exposure therapy intervention in

management of negative alterations in cognitions and mood symptoms of traumatic stress among young people in Kakuma division was also rejected. In addition, the hypothesis that stated that there is no statistical significant effectiveness of narrative exposure therapy intervention in management of alterations in arousal and reactivity to external stimuli symptoms of traumatic stress among young people in Kakuma division was equally rejected.

5.4 Conclusion

In conclusion, the study set out to assess the effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma division, Turkana County, Kenya. The study findings have proven that narrative exposure therapy intervention is effective in the management of memory intrusion symptoms of traumatic stress by causing a significant reduction of symptoms level at post-test among respondents who were subjected to treatment as compared to those who were in the control group. The study findings also showed that narrative exposure therapy is effective in management of avoidance of stimuli symptoms of traumatic stress through the post-test results which showed a statistical significant effectiveness of the intervention. Similarly, the findings between the experimental group and control group at post-test showed a reduction in negative alterations in cognitions and mood symptoms of traumatic stress. This revealed that narrative exposure therapy intervention is effective in the managements of the third symptoms cluster of traumatic stress. The results of the study among respondents at post-test in the treatment group equally showed a reduction in alterations in arousal and reactivity to external stimuli symptoms of traumatic stress. The study therefore concluded that narrative exposure therapy intervention is effective in the

management of traumatic stress among young people in Kakuma division, Turkana County.

5.5 Recommendations

Based on the findings and conclusion of the study, the researcher recommends the following to counselors, psychotherapist and other mental health workers working with traumatized population.

- (i) To use narrative exposure therapy intervention as an effective intervention in management of memory intrusion symptoms of traumatic stress among young people.
- (ii) To utilize narrative exposure therapy intervention as an effective intervention in management of avoidance of stimuli symptoms of traumatic stress among young people.
- (iii) To apply narrative exposure therapy intervention as an effective intervention in management of alternations in cognitions and mood symptoms of traumatic stress among young people.
- (iv) To explore narrative exposure therapy intervention as an effective intervention in management of alterations in arousal and reactivity to external stimuli symptoms of traumatic stress among young people.

5.6 Areas of Further Research

The researcher suggests the following areas for further research:

- i. A study on assessment of effectiveness of narrative exposure therapy intervention in management of traumatic stress among refugees in other refugees' settlements apart from Kakuma division in Turkana County.
- ii. Assessment of effectiveness of narrative exposure therapy intervention among children in Kakuma division using a version of narrative exposure therapy intervention model called KIDNET because this study focused on young people.
- iii. Research on assessment of effectiveness of narrative exposure therapy intervention among adults population since this study focused on young people.
- iv. The researcher suggests further studies on the assessment of effectiveness of narrative exposure therapy in the management of traumatic stress among other traumatized populations in Kenya like the Kenya defense Forces returning from Somalia, survivors of rape and communal clash among others.

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APPENDICES

Appendix 1: Research Instrument: PTSD Checklist for DSM-5 (PCL-5) with LEC-5

Introduction:

Kindly be honest in responding to the following questions. The information shared will be used only for this study and will remain confidential. Do not write your name rather use a code. It takes approximately 15-25 minutes to complete.

Part 1

Instructions: Listed below are a number of difficulties or stressful experiences that sometimes happen to people and maybe has happened to you. For each event Tick (√) one or more of the boxes to the right to indicate that: (a) **it happened to you personally**; (b) **you witnessed it happen to someone else**; (c) **you learned about it happening to a close family member or close friend**; (d) **you were exposed to it as part of your job** (for example, paramedic, police, military, or other first responder); (e) **you're not sure if it fits**; or (f) **it doesn't apply to you**. Be sure to consider your **entire life** (growing up as well as adulthood) as you go through the list of events.

Age: ____ **Code:** ____ **Gender** _____ **Nationality** _____ **Religion** _____

Life Events Checklist for DSM-5 (LEC-5)

	Event	Happened to me	Witnessed it	Learned about it	Part of my job	Not sure	Doesn't apply
1.	Natural disaster (for example, flood, hurricane, tornado, earthquake)						

2.	Fire or explosion						
3.	Transportation accident (for example, car accident, boat accident, train wreck, plane crash)						
4.	Serious accident at work, home, or during recreational activity						
5.	Exposure to toxic substance (for example, dangerous chemicals, radiation)						
6.	Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)						
7.	Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)						
8.	Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)						
9.	Other unwanted or uncomfortable sexual experience						
10.	Combat or exposure to a war-zone (in the military or as a civilian)						

11.	Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war)						
12.	Life-threatening illness or injury						
13.	Severe human suffering						
14.	Sudden violent death (for example, homicide, suicide)						
15.	Sudden accidental death						
16.	Serious injury, harm, or death you caused to someone else						
17.	Any other very stressful event or experience						

Part 2

Instructions: This questionnaire asks about problems you may have had after a very stressful experience involving **actual or threatened death, serious injury, violence or sexual violence**. It could be something that happened to you directly, something you witnessed, or something you learned happened to a close family member or close friend. Some examples are a **serious accident; fire; disaster** such as **flood, physical or sexual attack or abuse; war; homicide; or suicide**. Please read each problem carefully and then indicate one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

- a. Have you received counselling before? Yes ____ No _____

b. If 'Yes' to question 'a', do you need further counselling? Yes ____ No ____

Post-traumatic Stress Checklist for DSM-5 (PCL-5)

	In the past month, how much were you bothered by:	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
1.	Repeated, disturbing, and unwanted memories of the stressful experience?					
2.	Repeated, disturbing dreams of the stressful experience?					
3.	Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?					
4.	Feeling very upset when something reminded you of the stressful experience?					
5.	Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?					
	Total					
6.	Avoiding memories, thoughts, or feelings related to the stressful experience?					
7.	Avoiding external reminders of the stressful experience (for example, people,					

	places, conversations, activities, objects, or situations)?					
	Total					
8.	Trouble remembering important parts of the stressful experience?					
9.	Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?					
10.	Blaming yourself or someone else for the stressful experience or what happened after it?					
11.	Having strong negative feelings such as fear, horror, anger, guilt, or shame?					
12.	Loss of interest in activities that you used to enjoy?					
13.	Feeling distant or cut off from other people?					
14.	Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?					
	Total					
15.	Irritable behavior, angry outbursts, or acting aggressively?					

16.	Taking too many risks or doing things that could cause you harm?					
17.	Being "super alert" or watchful or on guard?					
18.	Feeling jumpy or easily startled?					
19.	Having difficulty concentrating?					
20.	Trouble falling or staying asleep?					
	Total					

Grand Total Score _____

Source: Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). *The PTSD Checklist for DSM-5 (PCL-5), Standard* [Measurement instrument]. Retrieved from <https://www.ptsd.va.gov>.

Appendix 2: Narrative Exposure Therapy Procedures

Narrative Exposure Therapy procedure is made of the following procedures:

1. Diagnostic interview/ psycho-education
2. Laying out the lifeline
3. Narrative exposure
4. Final session procedures

Psycho-education comprises the following;

- **Normalization:** This is about helping clients to understand that it is normal and understandable to have such feelings or reactions after an experience of trauma.
- **Legitimization:** It is assisting clients to know that the symptoms experienced are the result of responses from traumatization.
- **Description of trauma reactions:** This includes related symptoms of reaction to trauma.
- **Explanation of the therapeutic procedure:** This includes imaginal exposure and habituation, narration explanation of the therapeutic process.

Laying Out the Lifeline.

The lifeline procedure consists of layout the positive and negative events using symbols like flowers and stones on a line (e.g., rope) in a chronological order. With the help of a therapist, the client lays symbols while classifying them only briefly, just to label them for the time being. The aim of the lifeline exercise is the reconstruction of subjectively significant life events in their chronological order. The lifeline is a first look at the time and place when and where events happened within a life context. It serves as an

introduction to the logic of the therapeutic process. It is a useful roadmap for therapist. The “big” stones are, the ‘hot’ memories, the major traumatic event events or very difficult life periods. The flowers are the ‘cold’ memories, the events of normal life that form individual history. The lifeline exercise is concluded with a session to prevent client from developing avoidance towards the therapeutic process.

Narrative Exposure:

During the narrative exposure, the survivors continue recounting their life story in a chronological order. The process continues now in slow motion. Having the survivor imagine the beginning of the incident. The traumatic event is relived and client is helped in reprocessing of the sensory, cognitive, emotional and bodily details of the traumatic scenes. The client is helped to focus on what was being perceived during the traumatic incident (physical sensations, thoughts, actions at the time, shape and color of the objects, types of smell, patterns of sounds, etc.). The therapist assumes an empathic and accepting role and supports the processing of the material by following the emotional reactivity. The client is encouraged to describe the traumatic events with sensory details and to disclose the perceptions, cognitions, and emotions that had been experienced at that time. The therapist helps to reinforce reality and makes sure that the client stays in her/ his consciousness in the present time and talks about the past. Then successive traumatic experiences are processed added to the narration. The procedure is repeated in succeeding sessions until a final account of the client’s life span and complete biographical narrative are created.

Final Session procedures

During the final session procedures, the events constituting the individual's life are reviewed as a contextualized and integrated narration. The complete lifeline at the end of the NET treatment include memories that were not previously accessible. After the completion of the NET, Client are less preoccupied with their past and now focused on how to find their way back to life and how to construct a liveable, productive future. At this time there is an anticipated symptom remission to a degree at which PTSD is no longer diagnosable.

Overview of the Therapeutic Elements of NET

1. Chronological representation of the autobiographical/fragmented memory
2. Exposure to the "hot spots" and full activation of the fear memory to modify the emotional network. It includes learning to separate the traumatic memory from the conditioned emotional response through detailed narration and imagination of the traumatic event
3. Meaningful association and integration of physiological, sensory, cognitive, and emotional responses to one's time, space, and life context.
4. Re-evaluation of cognitions, behavior and patterns (i.e., cognitive distortions, automatic thoughts, beliefs, responses) as well as reinterpretation of the meaning content through reprocessing of negative, fearful, and traumatic events completion and closure
5. Revisiting of positive life experiences to enhance mental support and to adjust basic beliefs and assumptions

6. Regaining of one's self dignity and esteem through satisfaction of the need for acknowledgement through the explicit human rights orientation of "testifying"

Examples of questions used in targeting elements of the fear/trauma structure across different levels of processing		
Element of Fear Structure	Past	Present
Sensory	"What did you see, and did they look like?" "Could you hear others crying or screaming or any other sound?" "Which part of your body did you feel the pain?"	"Do you have the picture of the experience in your mind right now like it was then" "What can you see right now?" "Can you hear the sound right now?" Can you feel the pain in your body right now like it hurt then? How does it feel?
Cognitive	"Did you think that you would die at that moment?"	What did you think then; what now?
Emotional	"Did you feel intense horror at that moment?"	"Can you feel the horror right, now like it felt then?"
Physiological	"Did your heart beat fast at that moment?" "Did you sweat a lot at that time?"	"Can you feel your heart beating fast right now like it was beating then?" "Are your hands sweating right now, like they were sweating then?"

Adapted and modified from:

Schauer, M., Neuner, F., & Elbert, T. (2011). *Narrative exposure therapy: A short term treatment for traumatic stress disorders* (2nd ed.). Cambridge, MA: Hogrefe Publishing.

Appendix 3: Letter of Introduction from ANU's DVC

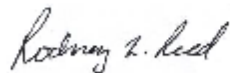


8th July 2020

RE: TO WHOM IT MAY CONCERN






Ime Okon Inyang (18J03DMCP006) is a bonafide student at Africa Nazarene University. He has finished his course work and has defended his thesis proposal entitled: - *“Assessment of effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma Division, Turkana County.”*

Any assistance accorded to him to facilitate data collection and finish his thesis is highly welcomed.



Rodney Reed, PhD.
DVC Academic & Student Affairs.

Appendix 4: Research Permit from NACOSTI

 REPUBLIC OF KENYA	
Ref No: 985563	Date of Issue: 20/July/2020
RESEARCH LICENSE	
	
<p>This is to Certify that Fr. Ime Okon Inyang of Africa Nazarene University, has been licensed to conduct research in Turkana on the topic: ASSESSMENT OF EFFECTIVENESS OF NARRATIVE EXPOSURE THERAPY INTERVENTION IN THE MANAGEMENT OF TRAUMATIC STRESS AMONG YOUNG PEOPLE IN KAKUMA DIVISION, TURKANA COUNTY, for the period ending ; 20/July/2021.</p>	
License No: NACOSTI/P/20/5838	
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Applicant Identification Number	Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Verification QR Code	
	
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THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

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3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies
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Mobile: 0713 788 787 / 0735 404 245
E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix 5: Refugee Affairs Secretariat's (RAS) Permit

RESTRICTED



OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR & CO-ORDINATION OF NATIONAL
GOVERNMENT
REFUGEE AFFAIRS SECRETARIAT (RAS) - KAKUMA

Website: www.refugees.go.ke
E-mail: refugee.affairs@kenya.go.ke
Tel: +254-020-2093675
Fax: +254-020-8047923
When replying please quote:

Refugee Affairs Secretariat
P.O. Box 57-30501
Kakuma, Kenya

24th July, 2020

RAS/KKM/ADM/VOL.4

TO WHOM IT MAY CONCERN

RE: AUTHORIZATION TO VISIT KAKUMA REFUGEE CAMP

Your request is here refer:-

Permission is hereby granted to the person mentioned below from NIGERIA. The purpose of the visit will be to conduct a research on **assessment of effectiveness of narrative exposure therapy intervention in the management of traumatic stress among young people in Kakuma Refugee Camp and Kalobeyei settlement**. He will be in the camp as from 24th July to 24th August, 2020 time not exceeding 1800hrs.

S/NO.	NAME	PASSPORT/ID NO	NATIONALITY
1.	FR. INYANG IME OKON	778089	NIGERIAN

He will be using M/Vehicle No: KCL 228U and KBY 575V

However, you are required to adhere to the regulation of the camp during the visit.

Kind Regards,

AMOS OMBEWA
D/CAMP MANAGER- KAKUMA CAMPS AND KALOBEYEI SETTLEMENT



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1 of 1

Appendix 6: Data Collection Photos



Appendix 7: Map of Turkana County indicating Kakuma Division

Source: FAO. (2006). *Map of Turkana district with administrative divisions*. Retrieved from https://www.researchgate.net/figure/Map-of-Turkana-district-with-administrative-divisions-adapted-from-FAO-2006_fig1_268387057: