



**NEAR EAST UNIVERSITY
INSTITUTE OF GRADUATE STUDIES
DEPARTMENT OF PSYCHOLOGY**

**THE IMPACT OF WAR EXPERIENCE ON PSYCHOLOGICAL WELL-
BEING AMONGST ADOLESCENTS IN SIERRA LEONE**

M.Sc. THESIS

BRIDGET NYAWO KAMA

Nicosia

February, 2023.

**BRIDGET NYAWO
KAMA**

**THE IMPACT OF WAR EXPERIENCE ON
PSYCHOLOGICAL WELL-BEING AMONGST
ADOLESCENTS IN SIERRA LEONE**

MASTER THESIS

2023

**NEAR EAST UNIVERSITY
INSTITUTE OF GRADUATE STUDIES
DEPARTMENT OF PSYCHOLOGY**

**THE IMPACT OF WAR EXPERIENCE ON PSYCHOLOGICAL
WELL-BEING AMONGST ADOLESCENTS IN SIERRA LEONE**

MSc. THESIS

BRIDGET NYAWO KAMARA

Supervisor




Assist. Prof. Dr Gloria Manyeruke

Nicosia

February, 2023.

Approval

We certify that we have read the thesis submitted by BRIDGET NYAWO KAMARA titled “THE IMPACT OF WAR EXPERIENCE ON PSYCHOLOGICAL WELL-BEING AMONGST ADOLESCENTS IN SIERRA LEONE” and that in our combined opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Educational Sciences.

Examining Committee	Name-Surname	Signature
Head of the Committee:	Assoc. Prof. Dr Ezgi Ulu	
Committee Member:	Dr Ayşe Buran	
Supervisor:	Assist. Prof. Dr Gloria Manyeruke	

Approved by the Head of the Department

20.../02/2023

Assoc. Prof. Dr Ezgi Ulu
Head of Department



Approved by the Institute of Graduate Studies

...../...../2023

Prof. Dr. Kemal Hüsni Can Başer
Head of the Institute




Declaration

I hereby declare that all information, documents, analysis, and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of the Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.



BRIDGET NYAWO KAMARA

27-03-2023

Acknowledgement

First, I thank God, the Almighty, for his shower of blessings throughout my research work to complete the research successfully. Though only my name appears on the cover of this dissertation, some people have contributed immensely in diverse ways to make my academic journey to be successful. Therefore, I am very honoured to mention these people. Special mention goes to my enthusiastic supervisor Dr Gloria Manyeruke for her excellent support, guidance, and patience, without her advice and support, it wouldn't have been that easy to finish this research. I would also like to convey my appreciation to the staff and professors of the Department of Psychology. Equally, the cooperation I received from the Institute of Research and Training staff is greatly appreciated.

Furthermore, I am indebted to my grandmother, Ambassador Lucretia Marian Shereef for her relentless support, motivation, and financial support during my academic pursuit. Most importantly, none of this would have been possible without her help and love for me. To my beloved mother Mrs Zainab Amara, words are not enough to describe your contribution to my life and no wage could be commensurate for your labour All that I have for you is ‘‘thank you, Mama’’.

To my beloved family and relatives, they have been a constant source of love, concern, support, and strength all these years. I would like to express my heartfelt gratitude to my Son Denis D.M.Sandy. Finally, thanks to many friends who helped me with this dissertation, I cannot disclose all of their names, but my special thanks go to Rebecca Cooper, and Daniella Sesay for their advice, support, translation, and comments throughout the process. Furthermore, I thank all who contributed in one way or another to the completion of this dissertation. I also place on record, my sense of gratitude to one and all, who directly or indirectly, have lent their hand in this venture.

Bridget Nyawo Kamara

Abstract**THE IMPACT OF WAR EXPERIENCE ON PSYCHOLOGICAL WELL-BEING AMONGST ADOLESCENTS IN SIERRA LEONE****Bridget Nyawo Kamara****MSc. Department of General Psychology****February 2023, 87 pages**

This study aims to investigate the impact of the war experience on the psychological well-being of adolescents in Sierra Leone. A quantitative research methodology was adopted to evaluate the impact of war experiences on adolescents' psychological well-being. A comparative research design was used with a self-administered questionnaire for a sample size of 133 adolescents in Sierra Leone. According to the study, war experiences such as separation from parents, loss of close relatives, and a personal victim of violence suffering physical injuries, are associated with poor psychological health. Whereas witnessed relation torture, exposure to armed combat and being personal victims of violence and gender participants are linked with resilience. Furthermore, the study found that the adolescents who had tertiary education showed better psychological health compare to those who cannot read and write due to their insights regarding coping. Therefore, the study recommends that formal training should be encouraged in postwar societies and among children affected by war to help them develop skills that would aid rapid and effective coping with war experiences. In addition, this study recommends that physical rehabilitation counselling programs and mental health services be developed for an individual with disabilities and severe injuries from war violence.

Keywords: psychological well-being, adolescents, depression, post-traumatic stress disorder.

Öz

SAVAŞ DENEYİMİNİN ETKİSİ SIERRA LEONE'DEKİ ERGENLERİN PSİKOLOJİK İYİ OLMASI

Bridget Nyawo Kamara

'nın fotoğrafı.Yüksek Lisans, Genel Psikoloji Bölümü

Eylül 2023, 87 sayfa

Devrimci Birleşik Cephe (RUF), önde gelen isyancı grup ve diğer savaşan gruplar ve birçok masum genci Sierra Leone Ulusal Ordusuna karşı savaşmak için askere aldı. Çoğu vahşete, insan haklarını ihlal etmeye, suç işlemeye ve uyuşturucu bağımlısı olmaya zorlandı. Çoğu ergen, psikolojik olarak refahlarını etkileyen muazzam duygusal ve fiziksel hasar gördü.

Bu çalışma, savaş deneyiminin Sierra Leone'de çatışma sonrası Liberya bağlamında hayatta kalan ergenlerin psikolojik iyi oluşları üzerindeki etkisini araştırmaktadır. Savaş deneyimlerinin ergenlerin psikolojik esenliği üzerindeki etkisini değerlendirmek için, Sierra Leone'deki 133 ergenden oluşan bir örneklem büyüklüğü için kendi kendine uygulanan bir yapı anketi, nicel bir araştırma metodolojisi benimsenmiştir.

Bu çalışmanın sonucu, ergenlerin cinsiyete göre yönelimlerinin Sierra Leone'deki savaş deneyimlerinden farklı olduğunu göstermektedir. Ayrıca eğitim düzeyi, Sierra Leone'deki ergen savaş deneyimine göre anlamlı bir farklılık göstermektedir.

Anahtar Kelimeler: Psikolojik İyi Oluş, Ergenler, Depresyon, Travma Sonrası Stres Bozukluğu, Savaş

Tables of Contents

Approval.....	1
Declaration	2
Acknowledgement.....	3
Abstract	4
Öz	5
Tables of Contents.....	6
List of Tables.....	10
List of Figures	11
List of Abbreviations.....	12
CHAPTER 1	13
Introduction	13
Problem Statement	15
Purpose of the Study	15
Research Question.....	16
Significance of Study	16
Limitations of the Study.....	17
Definition of Key Concepts	18
Anxiety:.....	18
Armed conflict	18
Depression.....	18
Post-Traumatic Stress Disorder (PTSD)	18
War-affected adolescents	18
War.....	19
CHAPTER II.....	20

Literature Review	20
Conceptual Framework	20
Bandura’s Self-Efficacy Theory	20
Lay Shattered Assumption Theory	21
War and PTSD	21
Diagnostic Criteria for PTSD	22
Criteria A	22
Criteria B	22
Criteria C	22
Criteria D	22
Criteria E	22
Criteria F	23
War and Resilience	23
Adolescents' Traumatic Experiences and Posttraumatic Stress	23
Factors Influencing Post-Trauma Functioning	25
Age	26
War experiences and PTSD	27
Secondary Stressors	28
Mental Well-Being and Social Adaptation	29
War Experiences of Women and Children in Sierra Leone	29
Rehabilitation for Soldiers	31
Adolescents Traumatic Experiences	32
Factors Associated with Post-Trauma Resilience	32
Related Research	34
CHAPTER III	37
Methodology	37

Research Design.....	37
Population and Sample.....	37
Data Collection Tools and Measurement.....	42
Sociodemographic Form	42
Psychological Well-being (PWB).....	43
PTSD Checklist -Civilian Version (PCLC)	43
Data Collection Procedure	44
Data analysis	44
Research Timeline.....	46
CHAPTER IV	47
Findings and Discussion	47
Research Question I	47
Research Question Two (2).....	52
Research Question Three (3).....	53
CHAPTER V.....	56
Discussion	56
CHAPTER VI	60
Conclusion and Recommendations	60
Conclusion	Error! Bookmark not defined.
Recommendations for Future Studies	61
Recommendations for Practice	61
Appendices.....	77
Appendix A: Permission to Use the Ryff PWB Scales.....	78
Appendix B: Inform consent.....	80
Appendix C: Ethical Approval From	85
Appendix D: Turnitin Similarity Report.....	86

Appendix E: CURRICULUM VITAE..... 87

List of Tables

Table 1. Demographic data of sample.....	38
Table 2. Crosstabulation of respondents who were separated from a parent and the reason for separation	39
Table 3. Crosstabulation of respondents who lost close relations and the reason for death.....	39
Table 4. Crosstabulation of respondents who were exposed to armed combat	40
Table 5. Crosstabulation of respondents who were personally the victim of violence	40
Table 6. Crosstabulation of respondents who were exposed to armed combat and occurrence	41
Table 7. Crosstabulation of respondents who were injured or killed someone	41
Table 8. Crosstabulation of respondents who were deprived of essential things in war	42
Table 9. Normality test table	45
Table 10. Research timeline	46
Table 11. The Prevalence Rate of PTSD Severity	47
Table 12. Comparison of psychological well-being and PTSD scores according to Refugee Status	47
Table 13. Comparison of psychological well-being and PTSD of respondents who were separated from their parents	48
Table 14. Comparison of psychological well-being and PTSD scores according to if the participant lost close relatives in the war	49
Table 15. Comparison of psychological well-being and PTSD scores according to participants who witnessed relation torture	49
Table 16. Comparison of psychological well-being and PTSD scores according to participants who were exposed to Armed Combat	50
Table 17. Comparison of psychological well-being and PTSD scores according to the participants who were personal victims of violence	51
Table 18. Comparison of psychological well-being and PTSD scores according to participants who suffered physical injuries and suffered physical injuries by violence	52
Table 19. Comparison of psychological well-being and PTSD scores according to participant's gender.....	53
Table 20. Difference between PTSD and the Level of Education of the participants	54

List of Figures

Figure 1. Permission to Use the Ryff PWB Scales	78
Figure 2. Permission to Use the Ryff PWB Scales 2	79

List of Abbreviations

DASS: Depression Anxiety Stress Scale-Short

DTS: Davison Trauma Scale

ICC: Intermediate Care Centers

MHPSS: Mental Health and Psychosocial Support

PSA: Profound Stress Atonement

PSA: Profound Stress Attunement

PTSD: Post-Traumatic Stress Disorder

RUF: Revolutionary United Front

SEI: School Environment Intervention

UCLA: the University of California Los Angeles

UNHCR: United Nations High Commission for Refugees

UNICEF: United Nations International Children's Emergency Fund

CHAPTER 1

Introduction

One out of every four adolescents comes from a nation where there is a history of war or a catastrophic occurrence (United Nations International Children's Emergency Fund, 2019). Compelled household disconnection, lack of opportunity for education and medical care, precarious accessibility to food and housing, as well as evacuation from cities and neighbourhoods, are all common occurrences for adolescents impacted by warfare (Betancourt et al., 2018).

Armed conflicts and wars generally have a catastrophic effect on the growth and well-being of adolescents. Narayana (2006) has shown that armed conflicts cause higher mortality rates, disabilities, infrastructural destruction, separation of families, and loss of property than any major disease outbreak. Among the vulnerable groups affected by war and conflicts, children encounter some of the most horrific impacts of conflicts. Some of the known impacts include; the death or separation of parents, siblings and neighbourhoods' sexual violence such as rape, beating, and many other forms of violence (Werner, 2012). The evidence of crimes and other offences in post-war torn countries especially in urban centres indicates that the rehabilitation of children that are mentally affected by war experiences should form a crucial part of the healing and development of society (Betancourt & William, 2008). The identification of adolescents who are at risk and the provision of mental health services in conflict-affected areas can be hampered by the lack of reliable measures for quantifying the incidence, severity, and variability of exposure. This is true even though research on the effects of war exposure on adolescent mental health has made significant progress in recent decades (Betancourt & Khan, 2008).

Rebel forces' abuse of minors escalated in the 1990s during the brutal armed conflict in Sierra Leone (Munro, 2019). Adolescents who are members of rebel forces and or victims of horrific abuse are more likely to develop mental health issues and complications which can present as; sadness, anxiousness, stress and depression (Barenbaum et al., 2004; Derluyn et al., 2004; Kohrt et al., 2008). At the end of the war, these ex-child soldiers or victims of abuse are integrated into society by several means such as education. Putting them in schools, being cared for by

social workers agencies or authorities and so, sometimes reunion with their original families (UNICEF, 2020).

Among others, these adolescents are frequently stigmatized and often do not get the required community support to put past experiences behind them (Goffman, 1963). The implications of this kind of societal neglect become; resentment, sadness, anxiety, violent attitudes, nervousness, and learning disabilities (Radford et al., 1963). The most typically measured and observed psychological action or event is post-traumatic stress disorder (PTSD) (Charlson et al. 2016; Hagenaars, 2011). Prevention of incident memories, and chronic hyperarousal and alertness signs are all indicators of PTSD. Physical signs may also include; stomach pains and migraines (Kers & Saccenti, 2021). The frequency of PTSD was found to be 30.6% of research on 81,866 people exposed to major wars and evacuations in 2009 (Steel, 2009). When past adolescent troops come back home, they are frequently stigmatized and do not get the support of their families and communities (Ali, 2018).

The Sierra Leone war, which destroyed millions of lives and properties, started in the 1990s when the Revolutionary United Front (RUF) was supported by the forces of Liberian dictator Charles Taylor (Peters, 2011). Partly because people were unhappy with how corrupt and ineffective the government was, the RUF were able to convince young people who didn't like the way things were to rise violently against the status quo (Bellows & Miguel, 2009). As the RUF grew in size by early 1992, it spread armed conflict to all parts of the country (Bellows & Miguel, 2009). Since Sierra Leone was also a country with a vast diamond deposit, it is commonly believed that the struggle for control of profitable diamond-producing regions was the primary cause of the conflict (Peters, 2011). During the civil war in Sierra Leone, an estimated 50,000 people of different age groups lost their lives, more than half of the population was forced out of their homes, and thousands of people were amputated, raped, or otherwise abused (Bellows & Miguel, 2009). Sierra Leone's civil war, which started in 1991, lasted for 10 years and officially ended in January 2002, when the British government sent in troops to put down rebel insurgents (Peters, 2011).

Problem Statement

Physical, emotional and social changes, along with exposure to private, abuse, or violence, can make teens at risk of mental health problems (WHO, 2020). In extreme circumstances, these mental and psychological impacts have been recorded to transform into PTSD (Pinheiro, 2006).

The frequency of crimes and other severe harm, such as the murder of parents in front of the victim's eyes, the chopping of human hands, whether family or not and the rape of these war-affected victims, has resulted in serious mental health issues. The victims lack the confidence to disclose these occurrences, and society is unwilling to listen to them even when they come to share their stories. Attempts to identify and remedy these incidents have also been limited. Without intervention, the potential for the transmission of these patterns of behaviour in impoverished nations where children are exposed to hazardous patterns of social interaction is predicted to rise (Richter, 2004). Trauma from wars, diseases, and natural catastrophes has long-term consequences that can be passed down through generations (Betancourt et al., 2015; Betancourt et al., 2018).

In Sierra Leone, accessibility to psychiatric services is hampered by a lack of psychiatric professionals, insufficient financing for problems of psychiatric nature interventions and treatments, and the stigma associated with psychiatric illness. These obstacles and inadequacies produce a mental health treatment gap which if unaddressed, results in suffering, incapacity, and economic loss (Muhorakeye & Biracyaza, 2021). Howbeit to the problem outline, the current research is looking at the experience encountered by adolescents and their psychological well-being.

Purpose of the Study

The goal of this investigation is to investigate the impact of war experiences on psychological well-being and PTSD among adolescents in Freetown. The researcher seeks to find out the experiences encountered by war-affected adolescents. It also assists in increasing awareness and knowledge of the nature of adolescent involvement

in armed conflict. And to identify appropriate remedies for minimizing the negative impact of war experiences on adolescents in Sierra Leone.

Research Question

The following research questions were of use to define the objectives:

1. Are there differences in psychological well-being and PTSD according to war experience among adolescents?
2. Are there differences in psychological well-being and PTSD according to gender?
3. Are there differences in psychological well-being and PTSD according to the level of education?

Significance of Study

Overall, this research is undertaken to fill the gaps in the literature on the effects of war on the psychological well-being of adolescents. The study will contribute to the development of remedies and rehabilitation strategies for war-affected adolescents of the transmission of patterns of violence.

Limited research has been conducted on the effect of war on psychological well-being in Sierra Leone, as such this study offers attention to the evaluation of general mental health complications faced by children in Sierra Leone, with an emphasis on the Sierra Leonean traditional perceptions of grief or misery.

One of the most significant motivations of this study is its uniqueness from existing studies on the subject matter. Bendavid et al., (2021) and Agbaria et al., (2021) concentrated on women and children who have been vulnerable to armed violence and have suffered negative health consequences deprivation of food, water, and clothes. Again, Agbaria et al., (2021) analysed the incidence of PTSD among children and adolescents who have been exposed to political violence such as polling station disturbances or confrontations during political campaign rallies using meta-analysis and systematic review as the technique in data collection and analysis for conclusions in the case of Palestine. This research is different from other studies as it seeks to separate adolescents from other groups of children, evaluating their experiences during the war and the related mental health state they have experienced

after the exposure. Additionally, there is also scarce literature about the effect of war on adolescents specifically in the African context.

Whereas research on conflicts and war has covered the impacts of war on children in many parts of the world, the evidence of cases of the psychological well-being of war-affected adolescents in cities has been scanty and scattered (Shenoda et al., 2018). As a result, considerable study on the impact of warfare on mental health issues such as depression, anger, and anxiety among teenagers is required, so that emphasis on the limitation of fundamental physiological demands, support, and rehabilitation for this group of individuals may be prioritized. In particular, the treatment of Post-Traumatic Stress Disorder (PTSD) among adolescents who have experienced conflict situations requires interventions to be prescribed in both practice and research.

The psychological well-being status of children exposed to war-related violence remains an under-researched area. This is particularly so on the African continent where some of the most horrific atrocities have occurred. According to Maclure and Denov (2006), during the Sierra Leone conflict, troops sliced open the stomachs of pregnant women to determine whether the baby is male or female and then publicly shot the lady, who died in the process. This research seeks to provide further empirical evidence to back the claim that adolescents who are exposed to war situations are prone to mental health conditions such as depression, and PTSD. In addition, the research will provide recommendations based on some of the best practices on the subject that can serve as vital sources for policy formulation and a stepping stone for prospective researchers in the field. The data collected and utilized in this research can be used as guidelines for the implementation of key social services and programs to meet and support the needs of adolescents who have been mentally affected by conflicts in Sierra Leone.

Limitations of the Study

To begin, there was a limited number of people in the sample. The difficulty of interpreting the findings of a study with a small sample size stems from the fact that the power of detection is diminished, which in turn raises the error rate.

Secondly, the participant is responsible for the administration of the questionnaire, which raises the possibility of dishonest answers, unanswered questions, disparities in understanding or interpretation, questionnaire fatigue, or biased responses. These factors could have had an impact on the results of the study.

Thirdly, the views of caregivers of the adolescent participants were not taken into consideration in this research. It would be important to obtain the comments of people who are responsible for the day-to-day upkeep of war-affected adolescents so that the true state of the economic situation of this group of people could be determined.

Definition of Key Concepts

Anxiety: According to Knowles and Olatunji (2020) anxiety is defined as stress and panic about ordinary events that are extreme, overwhelming, and continuous. Fast heart rate, breathlessness, perspiration, and tiredness may emerge.

Armed conflict: An armed conflict is a contentious disagreement involving government and/or territories in which the utilization of armed force by two sides, at minimum one of which is a state's government, leads to at least 25 battle-related fatalities in one calendar period (Tol et al, 2014).

Depression: a mental health illness defined by persistent poor mood or lack of interest in activities, severely impeding one's ability to function in daily life. (Hsu et al. 2002).

Post-Traumatic Stress Disorder (PTSD): According to Belrose et al. (2018) PTSD is an austere mental health state as a result of a frightening state separate from the common range of normal human experience.

War-affected adolescents: The group of individuals who are from the ages of 10 to 19 years who have experienced at least a war-related situation in their lifetime (Bryant, 2019).

War: War is defined as a violent armed confrontation between countries, governments, society, or paramilitary forces such as mercenary groups, insurgents, and militiamen. It is marked by excessive brutality, aggressiveness, damage, and fatalities and employs either regular or irregular military troops (Machiavelli, 2021).

CHAPTER II

Literature Review

This chapter presents an in-depth discussion of the war experience among adolescents. It also examines the influence of war experiences on the psychological well-being of adolescents as well as the processes to arrest or remedy those ramifications on these groups of individuals.

Conceptual Framework

Adolescent psychology describes the unique needs of adolescents' mental health. As individuals between 10 and 19 years of age Blakemore, (2020). Adolescents' psychological trauma from conflict can have a lifetime of consequences. The adolescents' growth may be significantly impacted by their exposure to unrest, violence, and insecurity. If the right kind of assistance isn't given, their suffering could last well after the conflict is over. Conflicts have negative effects on mental and physical health that are equally severe. Many factors contribute to mental and emotional stress, including prolonged exposure to trauma, death, disruption of regular social and work activities, and future uncertainty Epstein, (2004). In times of armed conflict, around 10% of persons who witness traumatic events will acquire major mental health problems, and another 10% will adopt behaviours that will impair their capacity to work efficiently, according to the World Health Organization (WHO, 2001).

Bandura's Self-Efficacy Theory

The social cognitive viewpoint connects arousal to perceived self-efficacy in dealing with dangers. Chance is a relational characteristic based on coping capacities and environmental risks. People who think they can control threats do not worry (Bandura, 1991) but individuals who believe they cannot handle dangerous circumstances have significant anxiety arousal. Estimated coping inefficacy is associated with increased subjective discomfort, autonomic arousal, and catecholamine production. According to experimental studies, most human activities are risky and environmental occurrences are not always within personal control (Bandura, 1988). Thus, managing anxiety arousal requires both behavioural coping

and faulty apprehensive cognitions (Bandura, 1988). The main cause of anxiety is the belief that one cannot control frightening thoughts.

Lay Shattered Assumption Theory

Several theories are presented to explain the development of PTSD and cognitive models offered a useful conceptualization. Janoff-Bulman's (1992) theory of shattered assumptions assumes a worldview consisting of underlying assumptions about beliefs about the self and the world, a benevolent and predictable place in which the individual possesses the competence and worth (Trauma (2011)). According to the theory, crime assumptions are undermined, or shattered, by the experience of trauma. as a result, individuals no longer perceive the world as benevolent and predictable or themselves as competent and invulnerable. Following countries of defenceless and terrifying cognition, PTSD Janoff-Bulma, (2011) is made up of Janoff Bulman's, 16 traumatic models of shattered assumption, and causal beliefs that are involved in reconstructing the shattered assumption in the aftermath of excessive reporting (Epstein, 2004). Inferences about mental illness involve attribution procedures that considerably provide people with a sense of control and predictability over their lives.

War and PTSD

War is a confrontation with many armed actors, including private armies, insurgent organizations, and fighters (Smihula, 2013). After the war, people develop post-traumatic stress disorder (PTSD), thinking about an event, recurring pain, anxiety, and memory problems which isolates PTSD from other mental health illnesses. Any age, gender, or culture might be affected. The disease has been known since the 1970s. It has had many names since ancient Greece such as combat stress reaction (CSR) as well as battle fatigue.

PTSD can occur as a result of car or plane crashes, criminal acts, physical or sexual assaults, natural disasters like; floods or explosions, or seeing death (Asalgoo et al., 2014). Also, traumatic and distressing events that threaten life and safety events that cause insecurity and recurring incidents of war can cause this disorder (Asalgoo et al., 2014). PTSD is caused by intense anxiety, helplessness, or terror

after a stressful event (Kienzler, 2008), like wartime trauma. Adolescents experience conflict with military combat, violent personal assault, kidnapping, hostage-taking, and terrorist attacks. (Kienzler, 2008). The conviction that one cannot regulate frightful thoughts is the primary contributor to anxiety. The main co-effects of observed coping inefficiency in self-protective behaviour, which in turn causes PTSD, are anxiety arousal and avoidance.

Diagnostic Criteria for PTSD

The following textual content summarizes the diagnostic criteria required for the analysis of PTSD:

Criteria A: Direct exposure, witnessing the trauma, or both realizing that a family member or close friend has experienced stress indirect exposure to the traumatic details, typically during the carrying out of professional duties (e.g., first responders, medics)

Criteria B: The following techniques are regularly used to retrain for stressful situations: Unwanted distressing memories, flashbacks emotional distress following exposure to unsettling memories body response following exposure to stress conditions.

Criteria C: Avoidance of trauma-related stimuli after the trauma, can be done in the following ways. Trauma-associated mind or feeling and Trauma-associated outside reminders

Criteria D: Poor mind or feeling that started or worsened after the trauma, within the following manners. Incapability to key capabilities of the trauma overly negative mind and assumptions approximately oneself in the sector exaggerated blame of self or others for causing the trauma. Poor affect reduced hobby in sports Feeling isolated trouble experiencing high-quality effects on

Criteria E: Trauma-associated arousal and reactivity that commenced or worsened after the trauma, within the following manner(s): Irritability or aggression risky or unfavourable behaviour hypervigilance heightened startle reaction trouble concentrating difficulty dozing

Criteria F: Signs remaining for more than 1 month. Signs and symptoms create misery or practical impairment. Signs and symptoms are not due to medicine, substance use, or other illnesses.(Widiger et al, 2013).

War and Resilience

Similar to the concepts of stress and trauma, the term resilience refers to both a process and a consequence. Resilience may be thought of as a process that involves a transaction between human characteristics and resources as well as the environment. This transaction is somewhat vague and receives little attention from researchers (Liltz, 2014). The consequence of resilience is a dynamic process, which cannot be adequately described by a snapshot in time. To put it another way, resilience needs to be long-lasting to be considered a trait rather than a transient condition. Take into account the paradox between the seemingly spontaneous recovery from early incapacitation and the delayed trauma-linked adaption issues (such as post-traumatic stress disorder, substance misuse, violence, withdrawal, employment problems, etc.). For a vast number of war victims, it seems reasonable to assume adolescents will always have difficulties with resilience due to their exposure to repeated and chronic trauma (Liltz, 2014).

Adolescents' Traumatic Experiences and Posttraumatic Stress

For purpose of the research on excessive warfare exposure figuring out former child infantrymen, combat studies had been analyzed in facts evaluation which in clouds being raped, and committing rape, injuring or killing someone. The negative impacts of rape on both girls and boys have been documented in recent research on child soldiers in West Africa, reactions consisting of being judged, denied assistance or blamed can also efficaciously repress the survivor's voices, leaving them powerless and silent Betancourt et al., (2010).

Additionally, the reality of participating in acts of violence, particularly those that result in the harm or death of others, is particularly concerning for the mental health of those compelled to participate in such behaviours, such as children. Farhood et al. (1993) discuss the effects of stressful life events related to the conflict on the health of families that have been enduring the war-related conditions that have

prevailed in Lebanon. Numerous somatic disorders as well as a wide spectrum of psychiatric problems, including depression, anxiety, and poor interpersonal relationships, have been linked to stressful life events. The negative psychological effects of combat stress not only seem to last for a long time, but they could last for the rest of one's life and even into the next generation. Therefore, the mental wounds caused by (PTSD) were evidenced in the offspring of World War II veterans. Farwell (2003) takes a close look at the effects of war trauma on young people in Eritrea, including the psychological symptoms they exhibit and the environmental factors that have a bearing on the psychosocial health in the country's post-war setting. Trauma caused by war can be viewed as defined as psychological, it is rooted in the socioeconomic and political realities of battle and its aftermath in a society. In Eritrea, 10% of teenagers served as freedom fighters, primarily in non-combat positions, and almost two-thirds of adolescents across regions had unknowingly been involved in the fighting. The young people who were compelled to flee fighting and bombardment frequently faced serious food and water shortages before the organization of rescue efforts. There were intermittent severe water shortages among people who stayed in the towns. In addition to these shortages, access to essential commodities was frequently used as a weapon of oppression.

It is commonly recognized that psychological health is negatively affected when individuals are exposed to war-related trauma (Pham et al., 2004; Srinivasa & Murthy, 2007). Existing research has established evidence that PTSD among adolescents is because of war tragedies and associated crimes against humanity (Mel et al., 2009). Mels et al. (2009) argued that incidence levels of PTSD have been estimated to vary from 22% to 90%. In the backdrop of the Rwandan massacre, a UN Kid's Fund study indicated that 95% of people aged between 8 to 19 years examined had encountered atrocities throughout the conflict, with 7% meeting the threshold level for medical PTSD characteristics. 18% in an adult population, incidence levels were comparable (94.1%), but only 24.8% met the PTSD complication standards (Pharm et al., 2004).

Factors Influencing Post-Trauma Functioning

Many articles study related to the gender, age, and experiences of people with PTSD. In terms of gender disparities, most research found that female past child soldiers had more severe psychological difficulties as compared to boy soldiers, which is consistent with tendencies seen even in non-violent communities. Betancourt and his colleagues discovered that in Sierra Leone, self-belief and self-esteem behaviours were significantly lower among women, even after attempting to control conflict encounters (Betancourt et al., 2010; Betancourt et al., 2011).

A handful of researchers examined whether military experiences impacted girls more than boys among adolescent soldier class relationship designs (child civilians versus child soldiers). Girls were 6.80% most prone to have PTSD if they had some military involvement during conflict periods than if they were inhabitants, and males were 3.81% more prone to have PTSD if they had been involved in military activities during conflict periods as compared to situations where they were common people in the society.

Modern research has concentrated on finding objective pre and posttraumatic environment variables as risk factors for persistent PTSD. According to Foa and Riggs (1994), the likelihood of PTSD increases when the trauma is mixed feelings as well as when there is a higher level of life-threatening exposure, injury, or loss of other persons (Pynoos et al., 1987).

Certain factors have been found in the existing research that influences the development of posttraumatic stress symptoms in teenagers. These factors are connected across embedded structures; mesosystems, and macro levels in a crisis setting (Boothby, 2008; Murray, 2010), including; gender (Ehnholt & Yule, 2006; Barenbaum et al. 2004; Derluyn et al. 2008) and poor family support (Ehnholt & Uyule, 2006). The accumulated traumatic experiences are linked to increased symptoms of adolescence, parental mortality, and averaged residential space have an impact on occurrence patterns and symptoms degrees where female adolescents have more symptoms than men (Barenbaum et al., 2004).

In terms of gender disparities, most research found that female past child soldiers had more severe psychological difficulties as compared to boy soldiers, which is consistent with tendencies seen even in non-violent communities.

Betancourt and his colleagues discovered that in Sierra Leone, self-belief and self-esteem behaviours were significantly lower among women, even after attempting to control conflict encounters (Betancourt et al., 2010; Betancourt et al., 2011).

In the Nepal research, girls said they were subjected to gender-based communal shame as a result of public views that their Hindu cleanliness was already compromised (Kohrt et al., 2010).

In one Ugandan research, girls also claimed that they obtained less societal assistance (Annan et al., 2011). The impact of interventions was also influenced by gender.

Sexual identity and kidnapping history also serve as a moderating factor in terms of the impact of group Interpersonal Therapy (IPT-G) in a solution or program affected adolescents, incorporating ex-combatant between the ages of 14-17 years, in research in northern Uganda (Betancourt et al., 2012).

These findings imply that in the Nepali setting, girls are more distressed than boys as a consequence of their military engagement although their life. Strong correlations were only found for PTSD effects and not for other impacts like despair, nervousness, or impaired functionality. Gender and social inclusion have also been studied, with findings revealing disparities in how households and societies regard returned boys versus returned girls.

Three years just after the 2004 terrorist attack in Beslan Russia, Scrimin et al.(2011) performed research with 58 school-aged children and revealed that three years after the terrorist attack, 17 individuals (29.3%) still met the diagnostic criteria for PTSD. There were no statistically significant differences between the sexes in the 15 people who had direct exposure to the attack (representing 50% of the exposed group) and the 2 people who had experienced indirect exposure (representing 7% of the exposed group). There has been research on the fact that males and females react to trauma in different ways. (Finkelhor, 1990).

Age

Age has also been identified as a determining element and there may be a decline in the incidence of PTSD with age, but it still affects a significant number of older persons. However, the median onset age in adults, according to the National

Comorbidity Survey Replication NCS-R, was 23 (Wang 2008). Nevertheless, children seem to be the more traumatized by war violence and are held to high standards in rehabilitation in war-torn nations (Srinivasa & Murthy, 2007). As a result, adolescent psychological and socioeconomic restoration is prominent in the humanitarian and developmental ideology (Mulendu & Wasingya, 2017; Albertyn et al., 2003; Mels et al., 2009).

PTSD incidence ranged from 25% among Palestinian adolescents during wartime (Thabet et al., 2004) to 41% points among adolescents residing in Sarajevo during the Bosnian crisis (Allwood et al., 2002). A review of Rwandan orphanages ten years after the massacre indicated that 4% of adolescents were still experiencing PTSD (Schaal and Elbert, 2006), demonstrating the long-term psychiatric complications in adolescents as a result of the violence.

War experiences and PTSD

The susceptibility to a traumatizing event and associated posttraumatic stress manifestations in adolescents and their mediating elements were examined by Byles et al. (2009). Increased incidences of mental problems among traumatized children, especially PTSD, have been demonstrated in research examining the psychological effects of war on adolescents living in conflict zones.

Researchers such as Betancourt et al. (2010), Kohrt et al., (2008), Okello et al., (2007), and Santacruz and Arana, (2002) found links between extremely destructive aggression encounters and emotional health difficulties. Respondents in El Salvador who saw the loss of family relations or colleagues, as well as adolescents who got crippled after recruitment, showed increased levels of emotional anguish (Santacruz & Arana, 2002). Torture experience was linked to a higher risk of PTSD in the Nepalese study (Kohrt et al., 2008). Ugandan research concluded links between a lack of food and water, as well as being compelled to conduct rituals, and higher levels of PTSD (Okello et al., 2007). Sri Lanka, Uganda, the Democratic Republic of Congo, and Sierra Leone have all recorded high levels of aggression against adolescents who went through war (Jefferson, 2004). The study proved that 64% of adolescent troops in the DRC and 45% in Sri Lanka who were studied

said they killed civilians during combat (Bayer et al. 2007; Kanagaratnam et al., 2005). In Uganda, levels of murder varied from 7.5% to 67.1% of adolescent soldiers in Sierra Leone, and 29% of adolescent soldiers serviced by the Interim Care Center recounted harming or murdering others throughout the conflict (Betancourt et al., 2011). In a study from Sierra Leone, war events including homicides and being a target of sexual assault were found to be better determinants of discomfort over time than other factors like overall awareness (Betancourt et al., 2010).

Secondary Stressors

Adolescents who have been subjected to war or natural catastrophes are extremely prone to secondary stressors such as displacement, starvation, parental bereavement, and communal hostility (Pynoos et al., 1999; Shaw, 2003). In this respect, research undertaken by Catani and colleagues in Sri Lanka indicated that adolescents traumatized by the Tsunami and the insurrection also indicated a disproportionately significant incidence of domestic abuse episodes (Catani et al. 2008). The study group in Sri Lanka also showed a significant dose-effect association between exposure to diverse emotional situations and PTSD. These findings suggest that when looking into the accumulated impacts of traumatic situations on adolescents' health, the influence of familial violence should be taken into account. The main incidence of anxiety disorders and significant depression among war-affected groups is believed to be 2 to 4 times higher than worldwide incidence estimations. Wartime experiences have a significant impact on adolescents' mental health (Zack-Williams, 2006).

The multigenerational impacts of military wars are also a big worry, due to rising degrees of family aggression and family system disruption, (Devakumar et al., 2014). Sexual and domestic abuse have been identified as additional triggering elements in children and adolescents' mental health disorders (Lokuge et al., 2013). Relatively worse psychosocial consequences of adolescents who have experienced war are linked to caregivers' mental health concerns such as parental depressive episodes and post-traumatic stress. The involvement of children in the war, whether as victims or offenders, has far-reaching implications. The effects of war included

having to deal with severe physical disabilities and impairments, family loss, disturbing recollections of war and atrocity, as well as emotions of shame and remorse (Denov, 2010). Furthermore, in the aftermath of a battle, children were sometimes forced to face rejection from their families and societies. Participants during this research reported getting hurt, physically as well as emotionally. Scars of all types served as a powerful and symbolic reminder of the cruelty and violence endured by children during the war.

Mental Well-Being and Social Adaptation

Children who find themselves among people who have access to guns and other related military weapons play a variety of duties, including troops, couriers, chefs, servants, enemy combatants, minesweepers, and bodyguards (Coalition to Stop the Use of Child Soldiers, 2008). The majority are compelled to commit acts of violence, including attacks on villages and grave tragedies (Coalition to Stop the Use of Child Soldiers, 2008; Wessells & Jonah, 2006). Child military members are routinely exposed to violent behaviour and physiological mistreatment for extended periods, causing serious psychological well-being implications and social misfit when they can escape or are aided to escape (Betancourt et al., 2010; Coalition to Stop the Use of Child Soldiers, 2008; Gingerich & Leaning, 2004; Johnson et al., 2008; Kohrt, et al., 2010; Ward & Marsh, 2006). Young women encounter the tragic circumstances of being raped, which has consequences that are not intended for and are preferred, such as unplanned pregnancies and kids. The study showed that across the board on measures of anxiety, girls fared worse than boys. As for PTSD, 34.31% of participants reported symptoms that matched DSM IV-TR criteria for partial PTSD, while 29.8% of responders fulfilled DSM IV-TR criteria for total PTSD.

War Experiences of Women and Children in Sierra Leone

Wars expose women and children to higher degrees of traumatic impacts, such as direct vulnerability to killing, dysfunctional family structures, and social collapse. Vulnerability to armed conflict is associated with a rise in the prevalence of mental diseases including PTSD and depression in children, adolescents, and women both before and after military conflict (Peter & Richards, 1998; Ramon et al., 2008; Bendavid et al., 2021).

Many adolescents who were once affiliated with the RUF recounted carrying out heinous acts of violence, whether in the context of battle or against civilians. Children reported being plagued by memories of violence they had observed, but they were also haunted by acts of violence they had perpetrated (Denov, 2006). Following the incident, these youngsters exhibited a great deal of anguish, regret, and humiliation for their behaviour. Following the conflict, many children were able to rejoin their families and return to their towns with the hopes of starting a fresh life (McKay & Mazurana, 2004). Reintegration of lives and properties was frequently difficult. When family and community people heard of their child's RUF participation, as well as their past position as combatants, several children endured extreme stigma and rejection (Stavrou, 2004). Former female soldiers face a unique set of stigmas and rejection. Girls were often to be alienated not just because of their previous involvement with the rebels, but also because many of them had been victims of sexual abuse.

Women who have experienced sexual abuse may face ostracism from their families and communities in Africa, as in other parts of the world (Denov, 2006; McKay & Mezurana, 2004). Marriageability is a critical problem in countries where women are valued largely for their roles as spouses and mothers. Marriage may be the greatest alternative for many girls and women seeking economic stability and safety. When girls give birth to children, often as a result of sexual assault, their kids, popularly referred to as "rebel children," may be ostracized or despised by the greater family and society (Carpenter, 2007).

The majority of girls and boys who participated in war may not have any skills beyond those acquired when combat or surviving the battle. Education is viewed as crucial for fostering safety and stability in the life of traumatized youngsters (Kuterovac & Kontac, 2002). Rapid re-establishment of schools and other forms of education is generally seen as an important life-affirming activity (Machel, 1996).

Rehabilitation for Soldiers

Anecdotal data from several countries reveal that only a minority of former child soldiers enrol in formal education in the aftermath of war (McKay & Azurana, 2004; Stavrou, 2004). To escape from poverty and social exclusion, education was seen as crucial. The long-term, post-conflict cycle of poverty appeared to be exacerbated by factors such as a lack of education and marketable skills, as well as the likelihood of social and familial rejection. Primary sources of income were small businesses, agricultural labour, and paid employment, with an average daily take-home pay of \$1 US. Some young individuals in the postwar era resorted to prostitution, petty crime, and drug use to make ends meet (Abramovitz, 2023). Innovations and appropriate rehabilitation programs for adolescents mentally affected by war. Initiatives that offer mental wellness and socioeconomic assistance to conflict-affected populations help to alleviate distress on a humane level. They could be preventative in terms of reducing psychiatric issues or promoting beneficial mental and sociological effects (Tol et al., 2013). Professional clinical mental health therapies and targeted psychological counselling are among the initiatives that could be beneficial (Dickson & Bangpan, 2018; Tol et al., 2011). Nevertheless, the research suggests that informed rehabilitation and preventative initiatives are critically lacking (Dua et al., 2011; Ehntholt & Yule, 2006). Extensive research is slanted towards effects rather than rehabilitation processes and programs (Jordans et al., 2009).

Numerous controlled clinical experiments in conflict-affected contexts indicate that when appropriately executed, quick, prospective first-line therapies for distress, anxiousness, and post-traumatic stress disorder can result in improvements (Betancourt et al., 2014; Jordans et al., 2010; Rahman et al., 2016).

Some post-war interventions for children can be implemented in the school context such as the school environment intervention (SEI) in the UK was part of a multi-school-based care programme that included widespread preventative health operations and mental health therapeutic interventions, for example, psychosocial coaching and recommendation to mental health experts (Jordans et al., 2010; Tol et al., 2014). The care plan was designed to reduce psychological indicators and enhance safeguarding characteristics in vulnerable children. It includes cognitive

behaviour modification strategies (psychoeducation, coping skills trying to reinforce, and conversation of previous traumatic experiences through attempting to draw) as well as imaginative eloquent aspects (cooperative games, structured movement, music, drama, and dance). The participants were exposed to combat events, took part in crimes, were physically assaulted, and had several indications and symptoms of post-traumatic stress disorder. As a result, many were psychologically affected during the research. Teaching improved coping skills, entrepreneurial skills training, and the provision of microcredit facilities are among the psychological intervention activities offered (Borgia, 2014).

Adolescents Traumatic Experiences

Women are more likely to have experienced sexual assault, domestic violence, and child sexual abuse than men. Men, on the other hand, are more prone to have been casualties of natural disasters, automobile accidents, and other accidental deaths (Tolin et al., 2008).

Women frequently have greater rates of PTSD and other trauma-related symptoms, such as internalizing disorders (such as anxiety and depression) and somatic complaints, than males, who have more externalizing disorders such as behaviour (Tolin et al., 2008; Kimerling, 2007). As a consequence of this, women may be more vulnerable to developing some unpleasant trauma-related symptoms than males, or they may be more ready to report having these symptoms. In addition, Thabet et al. (2008) used a research sample that consisted of 358 young people between the ages of 15 and 18. According to the results of the poll, the typical number of tense situations experienced by adolescents was 13.34.

Factors Associated with Post-Trauma Resilience

Furthermore, repeated and persistent traumas, such as war, raise the likelihood of PTSD comorbidities, most commonly in the form of depression or anxiety disorders (Williams, 2018). Another set of research, on the other hand, has attempted to find presumed shielding mechanisms. One intriguing socioenvironmental component is social support, which has been related to quicker and more effective posttraumatic recovery (Joshi, H.L., Singh, H. and Bindu (2009). Social assistance appears to be especially crucial in supporting children's

posttraumatic adjustment. Social assistance includes family cohesiveness and parental views about the traumatic experience (Child Care Health Dev, 2012).

The second set of research aimed to discover risk and preventive mechanisms among sociodemographic factors and personality traits. Gender and age are routinely explored among them, although the results are inconsistent. However, it appears that older kids and females are more likely to acquire PTSD (Fitzpatrick & Boldizar, 1993; Green et al., 1991).

Numerous research has connected higher self-esteem, a better sense of self-efficacy, extraversion, and optimism with fewer negative repercussions following traumatic incidents (Jerusalem, 1993; Solomon et al., 1990; Tedeschi & Calhoun, 1995). Cognitive evaluation and coping strategies are also believed to play a role in absorbing and adjusting to traumatic situations. For example, Kilpatrick and Resnick (1993) revealed that subjective danger was equally as relevant as objective features of life-threatening events in predicting PTSD. Similarly, feelings of control over the incident have shown similar effects. Typically, research has found that emotion-focused responding is linked with the prevalence and severity of PTSD symptoms (Solomon et al., 1990).

According to Hobfoll et al. (1996), traumatic events disrupt a more fundamental level of functioning than coping behaviour, and in that sense, variations in coping strategies are less relevant when the individual's existence is at stake. Nonetheless, it was discovered that religion, emotional expressiveness, and daydreaming are relatively favourably connected to PTSD. Some research investigated and emphasized the impact of traumatic experiences and/or the (post)traumatic environment, whilst others are more focused on personality qualities as determinants of posttraumatic adjustment.

However, as Foy et al., (1994) stated, study findings and work with traumatized individuals have demonstrated that an interactive method is superior to understanding traumatic stress. According to the interactive approach, posttraumatic adjustment is dependent on the combined and mutual effect of many categories of variables: (a) the kind and dimensions of trauma, (b) personality features, (c) posttraumatic environment characteristics, and (d) the person's coping resources. Durakovic-Belko et al. (2003) show that war trauma aspects, individual traits,

cognitive evaluations, and coping techniques all have a role in identifying who would have more severe PTSD symptoms. While personal and socio-environmental variables are the most powerful determinants of depression, war trauma dimensions are also highly associated with depressive symptoms. Female gender and low optimism were consistent risk variables for more significant depression and PTSD symptoms in the postwar transition. While trauma exposure is less in the area of boys. The best predictor of posttraumatic stress responses (PTSR), the female gender was the strongest predictor of depressive indicators.

Related Research

Brajša-Žganec (2005) examined whether war experiences, perceived social support (instrumental, self-esteem, belonging, and acceptance) and extraversion may predict depressive symptoms in early adolescent males and girls. 283 out of 583, 12 to 15-year-olds in the sample were displaced from Croatia for three and a half years. The results of the study indicated that boys only had increased depression symptoms after conflict. Boys with more perceived social support instrumental, self-esteem, belonging, and acceptance had fewer depression symptoms. Instrumental support and self-esteem reduced depression symptoms in females. 35% of the depression scale variation was explained by males and 27% by girls. Boys endure greater long-term conflict impacts than girls. Early adolescent males and girls with more perceived social support have lower depressive symptoms in wartime settings.

Hasanovic (2011) studied the psychological effects of war-traumatized children and adolescents in Bosnia and Herzegovina (BH). The 1992-1995 war-traumatized young BH population Harm-avoidant personalities cause trauma. Young individuals who were forced to leave their homes, countries, and parents during wartime may have more significant long-term psychiatric issues. Sarajevo and Srebrenica children have the worst war trauma. PTSD, depression, suicidal thoughts, and somatic, and behavioural issues affected the children's academic performance in the teenagers investigated. Children who fled their homes together or without families were likely to have had particularly painful war experiences, which were worsened by acculturation, repatriation, and lack of necessities. The widespread fighting and the number of families uprooted by the conflict imply that these studies

are likely to reflect the experience of a considerable percentage of the young Bosnian population. War-traumatized children and adolescents received infrequent, insufficient, and different care depending on whether they were resettled in their hometown or abroad

Another study by Slone and Shoshani (2020) in Israel examined the influence of personal political violence exposure history on subjective well-being. Adolescents were assessed for political life event exposure, psychotic disorders, emotional and behavioural issues, and subjective well-being. Psychotic circumstances, emotional and behavioural difficulties, and lower subjective well-being were linked to political or personal violence exposure severity. This study showed that political or personal violence exposure history and subjective event effects must be considered to measure the mental health risks to youths exposed to extended political violence.

Nyarko and Punamäki (2021) similarly examined trauma and resilience among Liberian teenage refugees in Ghana. The research highlighted young African refugees' war experiences and examined the meaning of war and its influence on their lives. 13 Liberian 25 to 35-year-old male and female refugees in Ghana volunteered to participate in semi-structured life history interviews. The phenomenological analysis found themes with several subthemes in the transcripts. The results showed five negative war themes: agony and humiliation, loss of intimate connections, awful scenes, risks to life, and flight. Six themes emerged on war's meaning and impact. Increased awareness, compassion, and identification with suffering were positive themes. Vivid terrible memories, lack of age-appropriate possibilities, and self-harm and destruction were the negative themes. Findings showed that young war survivors may be strongly motivated to participate in the nation- and peace-building and should be given opportunities to participate in political and civic life.

In a recent study, Osokina et al. (2022) examined war experiences and posttraumatic stress disorder (PTSD), anxiety, and depression in teenagers living in war-torn and tranquil regions of Ukraine more than two years after Russia invaded in 2014. (60.2) Donetsk youths observed armed attacks, (13.9) were victims of violence, and (27.9) were compelled to flee. They also exhibited higher scores of PTSD, severe anxiety, and moderately severe of severe depression. Teens in a war-

torn Ukrainian region were highly distressed by traumatic occurrences and daily stress.

CHAPTER III

Methodology

This chapter outlines the research design, population, sample and sample method data collection instrument, data collection processes, and data analysis method adopted in this current study.

Research Design

This current research adopts a quantitative research methodology to evaluate the impact of war experiences on adolescents' psychological well-being. This study will employ comparative research to gather data to answer the research. Comparative research investigates phenomena and then groups to identify their differences and similarities (Mokhtarian, 2016). Comparative research design is used to compare the difference between psychological well-being and PTSD scores between those with the specified war experiences and those who did not have them.

Population and Sample

The study adopted the purposive sampling technique to select the samples to be included in this study. Purposive sampling is a non-probability sampling technique in which units are selected because they have characteristics that you need in your sample. (Kassian Nikolopoulou et al, 2020). Purposive sampling is used to identify the cases of individuals or communities best suited to help you answer your research question universe of the present study will include adolescents who experienced war in Sierra Leone.

According to records obtained from the Kono district authorities, the research sample was established by submitting. The research sample was established according to the records obtained from Kono district authorities. The following criteria were used to select a village to participate in the study from a list in the Kono area.

The records of the district should specify that a village contains a population of more than 100 residents. A village should be one that was hard hit by the war. The adolescent population should exceed 50.

Following the above criteria respondents were drawn from a found village in the district of Kono using the purposive sampling technique. Cochran's formula for determining sample size was used to analyze the size of the sample.

A sample size of 100 adolescents was chosen for this work to preserve the study's statistical power, given that documents collected by the researcher from the district authorities indicated a population of 133 adolescents living in the Foindu village.

Table 1.

Demographic data of the sample

<i>Variable</i>	<i>Item</i>	<i>N</i>	<i>%</i>
Gender	Female	36	34.0
	Male	64	66.0
Age	10-12	42	39.6
	13-15	25	23.6
	16-20	33	31.1
Place of Birth	Eastern	27	25.5
	Northern	36	34.0
	Western	9	8.5
	Southern	28	26.4
Tribe	Temne	35	33.0
	Mende	16	15.1
	Limba	8	7.5
	Krio	9	8.5
	Fullah	17	16.0
	Mandigo	7	6.6
	Loko	8	7.5
Residence	Eastern	26	24.5
	Northern	28	26.4
	Western	30	28.3
	Southern	16	15.1
Longest Stay	Eastern	49	46.2
	Northern	19	17.9
	Western	24	22.6
	Southern	8	7.5
Level of Education	Cannot read and write	8	7.5
	Primary	45	42.5
	Vocational	2	1.9
	University	45	42.5
Refugee Status	Yes	64	60.4
	No	36	34.0

The findings of the study indicate that the male respondents were the majority which constitutes 64 (60.4%) and females 36 (34%). The majority of the respondents

were between the ages of 10-12 (39.6%), and a vast number of the respondents were birthed in the Northern region.

Most of the respondents which count 35 (33%) were from the tribe of Temne, and 30 (28.3%) are residents of the Western region of Sierra Leone, the longest stay of the respondents was in the eastern region of Sierra Leone they represent 49 (46.2%) of the participants. According to the level of education of the respondents, 45 (42.5%) completed primary and university which forms the majority and 64 (60.4%) of the respondents were refugees.

Table 2.

Cross tabulation of respondents who were separated from a parent and the reason for separation

Variables		Kidnapped	reported missing	Displaced	Job	left to fight	fled to another place	Total	
Separated From Parent	Yes	17 (21.3)	16 (20.0)	15 (18.8%)	0 (0.0%)	8 (10.0%)	9 (11.3%)	7 (8.8%)	80 (80%)
	No	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	20 (20%)
Total									100 (100%)

The total number of participants was 100 and the respondents who were separated from their parents were 80 (80%) Some were separated from their parents through kidnapping 17(17%), reported missing 16(16%), displaced persons 15(15%), through job 0(0.0%), those who went to fight 8(8%), and those who fled to another location 7(7%). However, a total of 20 (20%) participants reported that they were not separate from their parents.

Table 3.

Cross tabulation of respondents who lost close relations and the reason for death.

Variables	By Combat	By assassination	By a bomb explosion	Natural Death	Total	
Lost Close Relation	Yes	7(7%)	15(15%)	56 (56%)	9 (9%)	88 (88%)
	No	(0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	11(11.22%)
Total					100(100%)	

The total number of participants who lost close relations was 88(88%). Those who lost their close relation by bombing constituted the majority which is 56 (56%), followed by assassination 15 (15%), by natural death 9(9%), and by combat 7 (7%). While the total number of respondents who did not lose a relative was 11(11.22%).

Table 4.

Cross tabulation of respondents who were exposed to armed combat

Variables		Bomb hand grenade Explosion	Shooting	massacre (lots of people being killed at the same time)	Home attacked or shelled	school attacked or shelled	Total
Exposed	Yes	8	46	18	13	0	85
		(8%)	(46%)	(18%)	(13%)	(0.0%)	(85%)
Armed Combat	No	0	0	0	0	0	15
		(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(15%)
Total							100 (100%)

The result of cross tabulation between exposure to armed combat is presented in Table 4 above reveals that respondents who were exposed to armed combat by bomb hand grenade explosion are 8(8%), by shooting were the majority which is 46 (46%), 18 (18%) through massacre, 13 (13%) through the home attack, and 0 (0.0%). The total number of respondents who were not exposed was 15 (15%) while the number of those who were exposed is 85(85%).

Table 5.

Cross tabulation of respondents who were personally the victim of violence

Personally, Victims of Violence	Yes	8	44	18	13	0	83
		(8%)	(44%)	(18%)	(13%)	(0.0%)	(83%)
Violence	No	0	0	0	0	0	7
		(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(7%)
Total							100 (100%)

The results of cross tabulation between the personal victim of violence and the type of violence presented in table 5 above indicate that a total of 100 participants responded to this question, and those who were personal victims of violence by

bomb hand grenade explosion were 8(8%), by shooting was 44 (44%) and 18 (18%) by massacre (lots of people being killed at the same time), by home attacked or shelled was 13(13%), and by school attacked or shelled was 0(0.0%). Also, the total number of respondents who did not report being personal victims of violence in all the conditions was 7.

Table 6.

Crosstabulation of respondents who were exposed to armed combat and how many times happens

Variables		1 time	2 times	3times above	Never	Total	
Exposed	Yes	Count	7 (7%)	23 (23%)	53(53%)	2 (2%)	85 (85%)
Armed Combat	No	Count	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	15 (15%)
Total						100 (100%)	

The result of the crosstabulation contained in table 6 above shows that the total of the respondents who were exposed to combat once is 7(7%), 2 times is 23(23%), 3 times 53(53%), and never is 2(2 %). But those who reported that they were not exposed to armed combat in respect to the time that it happened totalling 15 (15%).

Table 7.

Cross tabulation of respondents who were injured or killed someone

Variables	Count	A close friend	Stranger	Uncle	Aunty	Father	Mother	Never/No One	Total
Injured	Yes	7 (7%)	24 (24%)	8 (8%)	8 (8%)	10 (10%)	19 (19%)	0 (0.0%)	76 (76%)
Killed Someone	No	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0%)
Total									76 (76%)

The total number of respondents that were injured or killed by someone was 76, the result also reveals that those who were injured or killed have the following scores; by a close friend 7(7%), by a strange 24(24.0%), by an uncle and my aunty

are both 8(8%), by a father 10(10%), by a mother 19(19%) and by never no one 0 (0.0%). However, the total number of those who reported that they were not injured nor killed by someone is 24.

Table 8.

Crosstabulation of respondents who were deprived of essential things in war

Variables		Without food for at least two days	Without drinking water for at least two days	Without shoes, clothes or shelter	Total
Deprived	Yes	54	16	23	93
Essential		(54%)	(16%)	(23%)	(93%)
Things	I don't	0	0	0	7
In War	know	(0.0%)	(0.0%)	(0.0%)	(7%)
Total					100 (100%)

The crosstabulation result of the respondent who was deprived of essential things and if yes specify is contained in table 8 above reveals that the total number of respondents who were deprived of essential things in the war were 93(93%). 54(54%) were deprived of food for at least two days, 16(16%) were deprived of water for at least two days, and 23(23%) were deprived of shoes, clothes or shelter. It was also revealed that the total number of those who do not know if they were deprived of essential things in the war was 7.

Data Collection Tools and Measurement

Self-administered questionnaires were utilized to collect data for the study's parameters. The first section collected sociodemographic information status followed by Ryff's Scales of Psychological Well-Being (PWB) and PTSD Checklist-Civilian Version (PCLC).

Sociodemographic Form:

There are two components to this form: - The first section includes the participants' age, gender, educational level of parents, home town, length of residence in the orphanage and employment status of parents. The second section covers questions about specific war-related life events among adolescents. In this section, the questionnaire is adapted from the Childhood war trauma questionnaire (CWTQ) designed by Macksoud, 1988. CWTQ-C is designed to be administered to

children between the ages of 10-16 years to assess children's exposure to war traumas. The war experience inquired in this research includes being forced to change residence or school because of shelling, looting, intimidation, forced to live in another country because of combat looting, and displacement. Other questions include the Separation of a parent, the reasons for separation include kidnapping, reported missing, left for job opportunities, and left to fight loss. of a relative during the war such as under combat by assassination, a bomb explosion or natural death witnessing someone being tortured, intimidated, injured, or killed and exposed to combat such as a shooting bomb explosion were also included among the war experiences in the questionnaire. Other war experiences included being victims of violence such as being tortured and arrested, suffering physical injuries such as burns, amputation and loss of sight being involved in armed combat or military activities such as fighting, spying and patrolling injuring or killing others and deprivation essential things like food, drink, water, and shelter.

Psychological Well-being (PWB)

The 2010 42-item Psychological Wellbeing (PWB), which be used in this research was designed by Carol D. Ryff, a psychologist. The scale measures six sub-scales of well-being and happiness, including; autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (Ryff et al., 2010). Respondents rated how strongly they agree or disagree with 42 statements, using a 7-point Likert scale, where; 1 = Strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = Neither agree nor disagree, 5 = Slightly agree, 6 = Agree, 7 = Strongly agree. A high score represents a person with many psychological resources and strengths. The Cronbach alpha (α) of autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance was found to be 0.88, 0.81, 0.81, 0.83, 0.82 and 0.85 respectively.

PTSD Checklist -Civilian Version (PCLC)

The PCL referred to as a PTSD Checklist was developed by Weathers et al. (1993). In this study, the PCL-C (civilian) would be used to ask about symptoms of

psychologically stressful experiences. When filling out the questionnaires, respondents indicated how much they were been bothered by a symptom over the past month using a 5-point Likert (1-5) scale, ticking their responses, where; 1 = Not at all, 2 = A little bit, 3 = Moderately, 4 = Quite a bit, 5 = Extremely. Higher scores indicate on the PCL-C scale a higher psychological stressful experience. The Cronbach alpha (α) of PCL=C was found to be 0.85.

Data Collection Procedure

A Self-administered questionnaire administration was employed for data collection. Participants were adolescents, consent was sought from parents or guardians. Informed consent was also sort from the adolescent. The questionnaires were then handed out to the identified respondents online to complete on their own time of war experiences. Respondents were given the flexibility of discontinuing participation whenever they wanted to do so. To account for the privacy and anonymity of the participants in the study, the information on every respondent was promised to be kept private and secured. Approval from the Near East University thesis committee was also obtained before the commencement of the study. For those who could not read and write, the questionnaire was read to them for a better understanding. For those who do not understand English, some interpreters read and explain in the language they could understand.

Data analysis

The data collected from the surveys were analysed using the statistical package for social sciences (SPSS) software version 26. And data normality was tested using skewness and kurtosis indicator. This program was chosen since it is a versatile data management and modification tool that is simple to use and less time-consuming (Lai et al., 2018). The table below shows the following data attributes in detail.

Table 9.
Normality test table

	N	Min	Max	M	Sd	Skewness	Kurtosis	
						Statistics	Std. Error	Statistic
Autonomy	100	23.00	33.00	28.2800	2.31848	-.090	-.241	-.453
Environmental mastery	100	21.00	35.00	27.1700	2.89568	-.113	-.241	-.389
Personal growth	100	19.00	33.00	25.5500	2.79384	-.238	-.241	-.164
Poesitive relation	100	24.00	36.00	30.5700	2.72754	-.440	-.241	-.302
Purpose in life	100	32.00	44.00	38.9100	2.33591	-.268	-.241	-.069
Self-assistance	100	20.00	31.00	26.0200	2.21099	-.060	-.241	-.223
PCLCtotal	100	32.00	59.00	42.3000	4.58037	.514	.241	1.029

A normality test was conducted to test if the data is normally distributed or not normally distributed. The result as contained in the above table indicates the standard deviation, the mean the maximum value and the minimum value. Furthermore, the skewness and kurtosis value are also indicated in the table. The skewness and kurtosis values as presented in table 9, suggest that the data is normally distributed. As highlighted by George and Mallery (1999), the most preferred and acceptable values of skewness and kurtosis ranged between -2 and +2. Therefore, parametric tests were employed for analysis such as the t-test and the person correlation analysis. Firstly a t-test was used to compare the participant who was separated from their parents and those who were not, t-test was used to compare the psychological well-being and PTSD of the participant who suffered physical injuries and those who did not, other t-tests were used to compare participant who lost close relations and reason of death, expose to armed combat and not, those who were personally a victim of violence and not, injured or killed someone, deprived of essential things in war. Secondly, a one-way ANOVA test was carried out to show the difference between PTSD and the level of education of participants.

Research Timeline

Research timeline

In the first stage of the research, permission for the various scale usage was obtained	November 2021.
Secondly, the ethics committee proposal permission and approval via email from the Near East committee board	September 2022
Thirdly, convenience and snowball sampling techniques were used to distribute the questionnaire of the study in an online google format and face-to-face to adolescents the form include, an informed consent sheet	March 2022
Literature Review and Examination of research work	February 2022 to January 2023
From the data obtained from the participants, the statistic was made as a result of the analysis and discussion.	February 2022 to January 2023

CHAPTER IV

Findings and Discussion

This chapter summarizes the findings of the current study using descriptive statistics, cross tabulation, and t-tests respectively.

Table 10.

The Prevalence Rate of PTSD Severity

Severity	N	%
Little to no Severity	0	0
Moderate to Moderate High	71	71%
High severity	29	29%
Total	100	100.0

From table 10 above, the prevalence rate of PTSD amongst the respondents was recorded to be between moderate to moderately high which represents 71(71%), and high severity which is 29 (29%).

Research Question I

Are there differences in psychological well-being and PTSD according to war experience among adolescents?

Table 11.

Comparison of psychological well-being and PTSD scores according to Refugee Status

Variables	Yes		No		T	P
	M	SD	M	SD		
Autonomy	28.1250	2.23607	28.5556	2.46628	-.890	.375
Environmental mastery	27.0469	2.52247	27.3889	3.49103	-.565	.573
Personal growth	25.3750	2.79171	25.8611	2.80971	-.834	.406
Positive relation	30.1563	2.79011	31.3056	2.48216	2.055	.043*
Purpose in life	38.7500	2.45596	39.1944	2.10875	-.913	.364
Self-assistance	25.9375	2.09212	26.1667	2.43193	-.496	.621
Psychological Well-being	164.3750	6.31577	161.8611	6.89991	1.848	.068
PCLC	42.6875	4.57347	41.6111	4.57495	1.130	.261

$p \leq 0.05^*$ $p \leq 0.001^{**}$

The test was used to compare the psychological well-being and PTSD score according to refugees. The findings of the independent sample t-test shown in table 11 reveal that there was no significant difference in psychological well-being and its subscales of autonomy according to positive relation, environmental mastery, and personal growth, purpose in life, self-assistance and PTSD according to refugee status. However, there were significant differences according to positive relation ($p=0.043$). Those who had been refugees had less psychological wellness on the subscale of positive relation, environmental mastery, and personal growth, purpose in life, self-assistance and PTSD.

Table 12.

Comparison of psychological well-being and PTSD of respondents who were separated from their parents

<i>Variables</i>	<i>Yes</i>		<i>No</i>		<i>T</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Autonomy	27.9750	2.19882	29.7143	3.03942	1.945	.055
Environmental mastery	27.0250	2.59491	24.4286	2.50713	2.545	.013*
Personal growth	25.3125	2.76778	26.0000	2.16025	-.639	.524
Positive relation	30.6250	2.73457	29.1429	3.13202	1.360	.177
Purpose in life	38.9000	2.33629	37.0000	2.23607	2.069	.042*
Self-assistance	25.7625	2.30708	26.4286	1.13389	-.753	.454
Psychological Well-being	163.6375	6.39470	161.7143	6.36957	0.763	.447
PCLC	42.6000	4.30954a	39.1429	4.41318	2.032	.045*

$p \leq 0.05^*$ $p \leq 0.001^{**}$

The independent sample t-test was used to compare the psychological well-being and PTSD of respondents who were separated from their parents and those are not. According to the study table, 12 shows that there was no significant difference in psychological well-being on the subscale between autonomy, personal growth, and positive relation between those separated from parents and those who were not in autonomy, personal growth, positive relation and self-assistance. However, there are statistically significant differences between individuals who were separated from their parents during the war and those who did not experience separation on the psychological well-being subscales of environmental mastery ($p=.013$), purpose in life ($p=.042$) and the PTSD total scored ($p=.045$). Individuals who were separated from their parents scored higher.

Table 13.

Comparison of psychological well-being and PTSD scores according to if the participant lost close relatives in the war

<i>Variables</i>	Yes		No		<i>T (100)</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Autonomy	28.1379	2.25250	29.5455	2.25227	-1.953	.054
Environmental mastery	26.7816	2.73405	29.9091	2.87939	-3.554	.001**
Personal growth	25.3793	2.77548	26.3636	2.65604	-1.113	.268
Positive relation	30.4138	2.77678	31.3636	2.29228	-1.087	.280
Purpose in life	38.6667	2.33112	40.3636	1.62928	-2.338	.021*
Self-assistance	25.7816	2.18571	27.2727	1.48936	-2.194	.031*
Psychological Well-being Total	163.5632	6.40984	162.9091	8.72301	0.306	.761
PCLC total	42.5402	4.69241	40.5455	3.20511	1.367	.175

$p \leq 0.05^*$ $p \leq 0.001^{**}$

The findings of the independent samples t-test in table 13 were used to compare the psychological well-being and PTSD score of the participant who lost close and those who did not. It indicates that there was no significant difference in psychological well-being and its subscale autonomy, personal growth, and positive relation, as well as PCLC total scores between those who lost a close relative and those who did not. Respondents who lost their close relatives in the war had a significantly lower score on a subscale of environmental mastery ($p=.001$), purpose in life (.021), and self-assistance ($p=.031$).

Table 14.

Comparison of psychological well-being and PTSD scores according to participants who witnessed relation torture

<i>Variables</i>	Yes		No		<i>T(100)</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Autonomy	28.1648	2.25223	29.7143	3.03942	1.711	.090
Environmental mastery	27.3736	2.77948	24.4286	2.50713	2.717	.008*
Personal growth	25.4396	2.76168	26.0000	2.16025	-.524	.602
Positive relation	30.7143	2.68446	29.1429	3.13202	1.476	.143
Purpose in life	39.0769	2.30570	37.0000	2.23607	2.301	.024*
Self-assistance	25.9451	2.27236	26.4286	1.13389	-.556	.580
Psychological Well-being Total	163.5495	6.66377	161.7143	6.36957	0.704	.483
PCLC total	42.3516	4.23051	39.1429	4.41318	1.928	.057

$p \leq 0.05^*$ $p \leq 0.001^{**}$

The result of the independent samples t-test contained in table 14 is to evaluate the differences in psychological well-being and PTSD scores between the respondents who witnessed their relations tortured and those who did not. The result revealed that there was no significant difference in psychological well-being and its subscale autonomy, personal growth, positive relation, and self-assistance. However, there were significant differences between participants who witnessed related torture and those who did not on the subscales of environmental mastery ($p=.008$) as well as purpose in life ($p=.024$). Those who witnessed relation torture in environment mastery scored higher on both subscales. There were no significant differences in PTSD scores.

Table 15.

Comparison of psychological well-being and PTSD scores according to participants who were exposed to Armed Combat

<i>Variables</i>	<i>Yes</i>		<i>No</i>		<i>T</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Autonomy	28.2824	2.27623	28.2667	2.63131	.024	.981
Environmental mastery	27.6118	2.78215	24.6667	2.22539	3.881	.000*
Personal growth	25.6235	2.80720	25.1333	2.77403	.625	.534
Positive relation	30.5412	2.68839	30.7333	3.03472	-.250	.803
Purpose in life	39.1294	2.34413	37.6667	1.91485	2.283	.025*
Self-assistance	26.2118	2.18814	24.9333	2.08624	2.100	.038*
Psychological Well-being Total	164.0000	6.68153	160.4667	5.44933	1.935	.056
PCLC total	42.5765	4.69644	40.7333	3.59497	1.445	.152

$p \leq 0.05^*$ $p \leq 0.001^{**}$

The result of the independent samples t-test contained in table 15 assesses if there are differences in psychological well-being and PTSD scores between the respondents who were exposed to armed combat and those who did not. The findings reveal that there was no significant difference in psychological well-being and the subscale of autonomy, personal growth or positive relation. There were also no significant differences in the PTSD scale. On the other hand, there were significant differences between participants who were exposed to armed combat and those who did not on the subscale of environmental mastery (0.000), purpose in life (0.025) as

well as self-assistance (0.038). Those who were exposed to armed combat scored higher than those who were not.

Table 16.

Comparison of psychological well-being and PTSD scores according to the participants who were personal victims of violence

<i>Variables</i>	<i>Yes</i>		<i>No</i>		<i>T</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Autonomy	28.2771	2.29162	29.7143	3.03942	-1.554	.124
Environmental mastery	27.6145	2.72670	24.4286	2.50713	2.984	.004*
Personal growth	25.5422	2.71985	26.0000	2.16025	-.433	.666
Positive relation	30.5783	2.69200	29.1429	3.13202	1.339	.184
Purpose in life	39.1566	2.36066	37.0000	2.23607	2.329	.022*
Self-assistance	26.1687	2.19100	26.4286	1.13389	-.309	.758
Psychological Well-being Total	163.9518	6.70985	161.7143	6.36957	0.850	.398
PCLC total	42.3735	4.38876	39.1429	4.41318	1.870	.608

$p \leq 0.05^*$ $p \leq 0.001^{**}$

The result of the independent samples t-test was used to compare the psychological well-being and PTSD scores amongst those who were the personal victim of violence and those who were not. Table 16 analysis to check if there are differences in psychological well-being and PTSD scores between the respondents who were personally the victim of violence and those who did not experience violence. It revealed that there was no significant difference in psychological well-being and its subscale of autonomy, personal growth, positive relation, and self-assistance. The result also found that there were significant differences in environmental mastery ($p=.004$), and purpose in life ($p=0.22$) Those who are victims of violence under the subscale scored higher. There were also no significant differences in PTSD scores

Table 17.

Comparison of psychological well-being and PTSD scores according to participants who suffered physical injuries and suffered physical injuries by violence

<i>Variables</i>	<i>Yes</i>		<i>No</i>		<i>T</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Autonomy	28.2813	1.83574	28.2727	2.55129	.017	.987
Environmental mastery	25.7813	2.51106	27.8333	2.78227	-3.531	.001**
Personal growth	25.1875	2.84477	25.6212	2.66467	-.739	.462
Positive relation	30.5938	2.76918	30.6061	2.73371	-.021	.983
Purpose in life	39.0938	2.14565	38.8485	2.45728	.482	.631
Self-assistance	24.9688	2.44269	26.4697	1.92330	-3.310	.001**
Psychological Well-being Total	162.4063	5.56985	163.9091	7.07265	-1.053	.295
PCLCttotal	43.0938	4.29823	41.6515	4.25529	1.568	.120

$p \leq 0.05^*$ $p \leq 0.001^{**}$

Table 17 above is the independent samples t-test used to compare the psychological well-being and PTSD scores of the participant who suffered physical injuries by violence and those who did not. The analysis shows that there was no significant difference in psychological well-being and its subscale autonomy, personal growth, positive relation, and purpose in life. The PCLC total also shows no significant difference. However, there was a significant difference between those who had physical injuries by violence and those who did not on the psychological well-being subscales of environmental mastery ($p=.001$), self-assistance ($p=.001$) and individuals who had physical injury by violence had lower scores.

Research Question Two (2)

Are there differences in psychological well-being and PTSD according to gender?

Table 18.

Comparison of psychological well-being and PTSD scores according to participant's gender

<i>Variables</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>T</i>	<i>P</i>
Autonomy	2.10442	28.1563	2.43792	710	.479
Environmental mastery	3.09377	27.5469	2.73095	1.753	.083
Personal growth	3.01780	25.3438	2.66201	.984	.327
Positive relation	2.99987	30.6250	2.58506	-.268	.760
Purpose in life	2.19288	38.5000	2.32993	2.396	.018*
Self-assistance	2.49746	25.9531	2.05039	.402	.689
Psychological Well-being Total	5.39371	163.2969	7.23896	0.348	.729
PCLC total	5.04920	41.9844	4.30390	.918	.361

$p \leq 0.05^*$ $p \leq 0.001^{**}$

The study table, 18 above shows the independent samples t-test used to compare psychological well-being and PTSD scores for gender participants. The analysis is to test if there is a difference in PTSD and psychological well-being across gender. The result of the analysis indicated that psychological well-being does not vary according to the respondents' gender. Autonomy, environmental mastery, personal growth, positive relation, and self-assistance subscales of psychological well-being and PCLC total are not significantly different according to the respondents' gender. However, there was a significant difference between the gender of the participants on the psychological well-being subscale of purpose in life ($p=.018$), females scored higher than males on the subscale of purpose in life.

Research Question Three (3)

Are there differences in psychological well-being and PTSD according to the level of education?

Table 19.*Difference between PTSD and the Level of Education of the participants*

<i>Variables</i>	<i>Level of Education</i>					
		<i>N</i>	<i>Mean</i>	<i>Std.Dev</i>	<i>F</i>	<i>Sig</i>
Autonomy	Cannot read and write	8	28.6250	2.19984	.476	.623
	Primary	45	28.4667	2.56373		
	Tertiary education	47	28.0426	2.10545		
Personal growth	Cannot read and write	8	28.0000	2.26779	3.545	.033
	Primary	45	25.2667	2.68328		
	Tertiary education	47	25.4043	2.82581		
Environmental mastery	Cannot read and write	8	24.6250	2.06588	9.075	.000
	Primary	45	28.3111	2.55683		
	Tertiary education	47	26.5106	2.88076		
Positive relation	Cannot read and write	8	28.7500	2.49285	1.974	.144
	Primary	45	30.7333	2.62332		
	Tertiary education	47	30.7234	2.80297		
Purpose in life	Cannot read and write	8	39.8750	2.03101	7.659	.001
	Primary	45	39.6889	2.21382		
	Tertiary education	47	38.0000	2.19684		
Self-assistance	Cannot read and write	8	23.6250	1.59799	8.806	.000
	Primary	45	26.7556	2.11225		
	Tertiary education	47	25.7234	2.06105		
Psychological wellbeing	Cannot read and write	8	173.2500	5.80025	7.027	.001
	Primary	45	177.6667	6.95766		
	Tertiary education	47	172.7234	6.06738		
PCLC total	Cannot read and write	8	43.5000	6.80336	1.979	.144
	Primary	45	41.3111	3.59180		
	Tertiary education	47	43.0426	4.89879		

$p \leq 0.05^*$ $p \leq 0.001^{**}$

ANOVA table was to compare the difference in psychological well-being and PTSD according to participants' level of education. The result indicates a significant difference in psychological well-being ($F_{3, 96}=7.027, p=0.001$) and self-assistance according to educational level ($F_{3, 96}=8.806, p=0.000$). Also, there are significant differences according to participants' level of education on the subscale of purpose in life ($F_{3, 96}=7.659, p=0.001$), environmental mastery ($F_{3, 96}=9.075, p=0.000$) and personal growth ($F_{3, 96}=3.545, p=0.033$). However, there were no significant differences in the psychological well-being subscales of autonomy ($p=.623$), positive relation ($p=.144$), and PCLC total ($p=.144$) according to levels of education respectively. Those who have primary education scored higher on psychological well-being, environmental mastery, positive revelation, and self-assistance. However, Autonomy, personal growth, purpose in life and PCLC total scored higher on those who cannot read or write.

CHAPTER V

Discussion

The purpose of this study is to investigate the impact of war experiences on PTSD in the psychological well-being of adolescents in Freetown. This section of the thesis presents a broad discussion of the findings. This is done in consonance with other existing literature on the topic.

Adolescents living in a war zone are susceptible to high war trauma, loss of social networks, engaging in organized violent --behaviours, and also experiencing daily stressors (Osokina et al., 2022). Respondents of 80% stated they had injured or killed someone. Respondents reported being deprived of food for two days because they were always on the move. Hence, it was difficult for them to access food, clothes, shelter, and other essentials like shoes and pads, especially for females.

As stated by Pate (2021), the result is that such individuals' lives and psychological wellness could improve if they build positive relationships with the people around them. For instance, some contend there is a direct connection between how much violence adolescents are exposed to and its psychopathological impact (DeVylder, Fedina & Link, et al., 2020). More so, the refugees were provided with timely and effective psychological health services, which included; mental health assessment, health facilities, food, clothing, and other health improvement programs (Osokina et al., 2022).

This study found that there were significant differences in environmental mastery and purpose in life, as well as PTSD levels, between individuals who were separated from their parents during the war and those who were not. Those who were separated from their parents scored higher on PTSD. This finding is consistent with a previous study done by Hrabok et al. (2020) which individuals separated from their parents had significantly higher PTSD; they also had significantly higher scores for environmental mastery and purpose in life. During the war, they are susceptible to developing a wide range of mental problems like PTSD as well as a decreased level of psychological wellness; stated that adolescents will improve their mental health for some people if their environmental mastery is intact, which means understanding their immediate environment and building effective relationships with others around

them (Hrabok et al., 2020). More so, being male, effective problem-solving strategies, engaging in leisure activities, and the availability of significant others' support regarding school work are some post-war resilience factors in refugee children and adolescents (Hildebrand et al., 2019). Post-war resilience could account for the higher score of environmental mastery and purpose in life among adolescents who were separated from their parents during the war. Reunification knowing the welfare of their parents even if they are dead.

The current study found significant differences in environmental mastery, purpose in life, and self-assistance between individuals who lost their close relatives and those who did not. The individuals who lost close relations had lower scores. Likewise, the study of Penta et al. (2022) also explained that losing close and loved ones as a result of war, in most cases, triggers mental unrest, which could emanate from panic, stress, and anxiety felt from such events. Penta et al. (2022) also mentioned that such individuals are less likely to understand their environment and live peaceably with the people around them. They may find it challenging to define their life's purpose as well as render any form of self-assistance themselves in stressful situations (Pate, 2021).

The present study also found differences in purpose in life and environment mastery according to if the respondents witnessed torture during the war. Those who witnessed torture scored higher. This finding is opposite to the study of Barroca et al. (2022), which also found that witnessing the torture of close and loved ones in any horrific situation could expose such individuals to post traumas and mental stressors, which could block their abilities to understand and relate effectively with those around them as well as find any purpose and meaning in the activities they are engaged in (Barroca et al., 2022). The plausibility of this incongruity is because of the support given in orphanages. The refugees were provided with psychosocial support services, food, clothing, and medical facilities, which helped them immensely and could contribute to the development of post-war resilience.

This study also discovered significant differences in environmental mastery, purpose in life, and self-assistance between individuals exposed to armed combat during war and those not. Those who were exposed to armed combat during the war scored higher. This finding is contrary to Wu et al. (2019) study, which also found

that one who is exposed to armed combat at war is likely to show some high level of posttraumatic symptomatology in their later lives and that they show a diminished level of environmental mastery, self-assistance and finding meaning in life. These discrepancies could be because there are some defensive skills for adolescents affected by war, such as a sense of agency, empathetic features, regulation of effect, and establishing a connection with the outside world.

The current study also found significant differences in psychological well-being, subscales of environmental mastery, and self-assistance between war-affected adolescents and those who did not. Those who sustained physical injuries during the war scored lower compared to those who did not sustain any injury. The study done by Tolin and Foa (2006), agrees with these findings as they also found that those whose war experience resulted in physical injuries like body wounds from a direct or stray bullet, eye damage, head injuries, and arm or leg injuries are likely to have a post-trauma impact which in most cases has a greater effect on their psychological well-being. They also mentioned that such people could improve mentally through the development of social skills that will enable and enhance their coping. Disability and physical pain effectively limit the interaction that they can have with the environment and their independence.

Also, this study found that the psychological well-being, subscale of purpose in life, and posttraumatic experience of individuals differ according to gender. Females scored higher on purpose in life, a subscale of psychological well-being. This is because, in most cases, females are always focused on adjusting to every situation in life.

Level of Education there was no significant difference in the autonomy scores across different levels of education. However, there was a significant difference in the scores for environmental mastery across different levels of education, where participants with higher levels of education had higher scores on this variable. They have better mental health, especially in their social skills, areas of environmental mastery, positive relationships, and self-assistance with those around them, and can assist themselves in difficult situations through coping and recovery compared to those who cannot read or write. The study of Netto et al. (2016) supports this finding as they found that the aftermath of war-affected adolescents with lower academic

attainment is usually high compared to those whose educational level is higher. The rationale behind these differences could be that those with higher educational attainment have more insight into coping strategies and recovery modes (Carmassi et al., 2018).

More so, in this study, the prevalence rate of PTSD amongst the participants was found to be that about 67.3% of the respondents recorded between moderate to moderate high severity rate of PTSD while 32.7% recorded high severity. All participants scored above, meeting the criteria for PTSD symptomology. A study done by Lanius et al. (2016) found that people who have a history of traumatization (events that ensued trauma) during adolescence stage are more likely to develop some posttraumatic symptomatology like alteration in identity, lack of purpose in life, incongruence with self, lack of personal growth, inability to find a positive relationship, loss of autonomy and in some cases memory problems (Lanius et al., 2016). Also, another study found that individuals with moderate trauma severity would possess fewer symptoms like dysphoria, anhedonia, situational panic, and low mood, unlike other serious symptoms mentioned earlier for high severity of traumas (Blevins et al., 2015; Nazarov et al., 2015). Furthermore, the result suggests no significant difference in PTSD according to war experiences except for parental separation.

CHAPTER VI

Conclusion and Recommendations

This research examined the impact of war experience on the psychological well-being of adolescents. The findings of this research are similar to previous studies which also found that war experience poses some psychological threat to the lives of adolescents.

This section of this document shall give conclusions based on the responses generated from the field. It is conclusive to note that, the civil war of Sierra Leone has contributed to the untold psychological upheavals on adolescents in Sierra Leone. A variety of war-affected victims were affected by emotional encroachments such as Post Traumatic Stress Disorder hereafter referred to as PTSD. It is also worthy of note that, in Sierra Leone during the war era were indoctrinated into the army forcefully and given ammunition to wreak mayhem on fellow citizens.

However, from the data generated in the field, it was also important to note that, the war does not only affect them emotionally, it expounds beyond that because it put schools and other adolescent recreational centres on hold. Again, this study's result found that women are more traumatized than men even though took part in the war than women. This could mean that men are more resilient to such traumatizing events than women due to strong emotional traits. However, daily interventions in the area of mental health would help women cope both socially and emotionally.

Also, those who cannot read and write recorded high trauma levels than those who had primary education. Studies have also shown that the aftermath of war is highly disastrous for individuals with lower education than those with higher educational qualifications. In other words, higher educational attainment exposes one to different coping mechanisms which help in reducing stress levels as a result of the war experiences.

Finally, the prevalence rate of PTSD severity indicated that all participants met the criteria for no PTSD.

Recommendations for Future Studies

This study used adolescents as the study's samples. Future studies could look into adults' war experience and how it would affect their psychological well-being since adults exhibit more resilience features in terms of stressors than adolescents. Future research could use more sample size to further investigate this discrepancy and the factors surrounding it.

Recommendations for Practice

According to this study's findings, those who cannot read and write were more traumatized compared to those who have at least primary education. This study recommends that formal and at least informal forms of education should be encouraged in war zones, to help them develop skills that would aid rapid and effective coping regarding such awful war experiences.

This study again found that individuals who sustained physical injuries during the war showed a lower self-assistance and environmental mastery score compared to those who did not sustain any physical injury. Therefore, this study recommends that psychological counselling programs and mental health services be developed for an individual with disabilities and severe injuries from war violence.

Also, according to the findings of this study, the severity rate of PTSD among these individuals was recorded between moderate to high severity though a lower percentage fell under high severity. Howbeit, the help of social workers, mental health professionals, and psychological counsellors could help these individuals in war zones to manage the traumatic effects.

References

- Abraham, A. (2001). Dancing with the chameleon: Sierra Leone and the elusive quest for peace. *Journal of Contemporary African Studies*, 19(2), 205-228
<https://doi.org/10.1080/02589000125498>
- Ager, A., Burnham, G., Checchi, F., Gayer, M., Grais, R. F., Henkens, M., Massaquoi, M. B. F. Nand, R. C. Navarro-Colorado, & Spiegel, P. (2014). Strengthening the evidence base for health programming in humanitarian crises. *Science*, 345(6202), 1290-1292.
[10.1126/science.1254164](https://doi.org/10.1126/science.1254164)
- Ali, H. (2018). “Sierra Leone’s Former Child Soldiers: A Longitudinal Study of Risk, Protective Factors, and Mental Health”(2010), by Theresa S. Betancourt, Robert T. Brennan, Julia Rubin-Smith, Garrett M. Fitzmaurice, and Stephen E. Gilman. *Embryo Project Encyclopedia*. <http://hdl.handle.net/10776/13044>
- Albertyn, R., Bickler, S. W., van As, A. B., Millar, A. J. W., & Rode, H. (2003). The effects of war on children in Africa. *Pediatric surgery international*, 19(4), 227-232. [10.1007/s00383-002-0926-9](https://doi.org/10.1007/s00383-002-0926-9)
- Amone P’Olak, K., Garnefski, N., & Kraaij, V. (2007). The impact of war experiences and physical abuse on formerly abducted boys in northern Uganda. *South African Psychiatry Review*, 10(1), 76–82. <https://hdl.handle.net/10520/EJC72973>
- Amone, -P, & Olak, K. (2005). The psychological impact of war and sexual abuse on adolescent girls in Northern Uganda. *Intervention: International Journal of Mental Health*, 5(3), 33–45.
<https://doi.org/10.1136/jech-2013-203042>
- Annan, J., Blattman, C., Mazurana, D., & Carlson, K. (2011). Civil War, Reintegration, and Gender in Northern Uganda. *Journal of Conflict Resolution*, 55(6), 877–908.
<https://doi.org/10.1177/0022002711408013>
- Armour, C., Müllerová, J., & Elhai, J. D. (2016). A systematic literature review of PTSD’s latent structure in the Diagnostic and Statistical Manual of Mental Disorders: DSM-IV to DSM-5. *Clinical Psychology Review*, 44, 60–74.
<https://doi.org/10.1016/j.cpr.2015.12.003>

- Asalگوو, S., Jahromi, G. P., Meftahi, G. H., & Sahraei, H. (2015). Posttraumatic stress disorder (PTSD): Mechanisms and possible treatments. *Neurophysiology*, *47*, 482-489.
<https://doi.org/10.1007/s11062-016-9559-9>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, *16*(1), 74-94. <https://doi.org/10.1007/BF02723327>
- Barenbaum, J., Ruchkin, V., & Schwab-Stone, M. (2004). The psychosocial aspects of children exposed to war: practice and policy initiatives. *Journal of child psychology and psychiatry*, *45*(1), 41-62. <https://doi.org/10.1046/j.0021-9630.2003.00304.x>.
- Bangpan, M., Dickson, K., Felix, L. and Chiumento, A. (2017). The impact of mental health and psychosocial support interventions on people affected by humanitarian emergencies: A systematic review. *Humanitarian Evidence Programme*.<https://oxfamilibrary.openrepository.com/handle/10546/620214>.
- Barroca, N. C. B., Della Santa, G., Suchecki, D., García-Cairasco, N., & de Lima Umeoka, E. H. (2022). Challenges in the use of animal models and perspectives for a translational view of stress and psychopathologies. *Neuroscience & Biobehavioral Reviews*, *10*(4),7-71. <https://doi.org/10.1016/j.neubiorev.2022.104771>
- Bandura, A. (1988). The self-efficacy conception of anxiety. *Anxiety research*, *1*(2), 77-98.
<https://doi.org/10.1080/10615808808248222>
- Bayer, C. P., Klasen, F., & Adam, H. (2007). Association of trauma and PTSD symptoms with openness to reconciliation and feelings of revenge among former Ugandan and Congolese child soldiers. *Jama*, *298*(5), 555-559. [10.1001/jama.298.5.555](https://doi.org/10.1001/jama.298.5.555)
- Bellows, J., & Miguel, E. (2009). War and local collective action in Sierra Leone. *Journal of Public Economics*, *93*(11-12), 1144-1157.
<https://doi.org/10.1016/j.jpubeco.2009.07.012>.
- Bendavid, E., Boerma, T., Akseer, N., Langer, A., Malembaka, E. B., Okiro, E. A., ... & Wise, P. (2021). The effects of armed conflict on the health of women and children. *The Lancet*, *397*(10273), 522-532. [https://doi.org/10.1016/S0140-6736\(21\)00131-8](https://doi.org/10.1016/S0140-6736(21)00131-8)
- Bennouna, C., Ocampo, M. G., Cohen, F., Basir, M., Allaf, C., Wessells, M., & Stark, L. (2019). Ecologies of care: mental health and psychosocial support for war-affected

- youth in the US. *Conflict and health*, 13, 1-13. <https://doi.org/10.1186/s13031-019-0233-x>
- Betancourt, T. S., & Khan, K. T. (2008). The mental health of children affected by armed conflict: protective processes and pathways to resilience. *International review of psychiatry*, 20(3), 317–328. <https://doi.org/10.1080/09540260802090363>
- Betancourt, T. S., Borisova, I., Williams, T. P., Meyers-Ohki, S. E., Rubin-Smith, J. E., Annan, J., & Kohrt, B. A. (2013). Research Review: Psychosocial adjustment and mental health in former child soldiers—a systematic review of the literature and recommendations for future research. *Journal of Child Psychology and Psychiatry*, 54(1), 17-36.
<https://doi.org/10.1111/j.1469-7610.2012.02620.>
- Betancourt, T. S., Thomson, D., & VanderWeele, T. J. (2018). War-related traumas and mental health across generations. *JAMA Psychiatry*, 75(1), 5-6.
[10.1001/jamapsychiatry.2017.3530](https://doi.org/10.1001/jamapsychiatry.2017.3530)
- Betancourt, T. S., & Williams, T. (2008). Building an evidence base on mental health interventions for children affected by armed conflict. *Intervention*, 6(1), 39–56.
<https://doi.org/10.1097/WTF.0b013e3282f761ff>
- Betancourt, T. S., Agnew-Blais, J., Gilman, S. E., Williams, D. R., & Ellis, B. H. (2010). Past horrors, present struggles: The role of stigma in the association between war experiences and psychosocial adjustment among former child soldiers in Sierra Leone. *Social science & medicine*, 70(1), 17-26.
<https://doi.org/10.1016/j.socscimed.2009.09.038>
- Betancourt, T. S., Newnham, E. A., Brennan, R. T., Verdeli, H., Borisova, I., Neugebauer, R., Bass, J. & Bolton, P. (2012). Moderators of treatment effectiveness for war-affected youth with depression in northern Uganda. *Journal of Adolescent Health*, 51(6), 544-550. [https://doi.org/10.1016/j.jadohealth.2012.02.010.](https://doi.org/10.1016/j.jadohealth.2012.02.010)
- Betancourt, T. S., Meyers-Ohki, S. E., Stevenson, A., Ingabire, C., Kanyanganzi, F., Munyana, M., & Beardslee, W. R. (2011). Using mixed-methods research to adapt and evaluate a family strengthening intervention in Rwanda. *African Journal of Traumatic Stress*, 2(1), 32-45
- Blanchet, K., Sistenich, V., Ramesh, A., Frison, S., Warren, E., Hossain, M., Knight, A., Lewis, C., Smith, J., Woodward, A., & Dahab, M. (2013). An evidence review of

- research on health interventions in humanitarian crises. *London School of Hygiene & Tropical Medicine*, <https://researchonline.lshtm.ac.uk/id/eprint/2172838>
- Boothby, N. (2008). Political violence and development: an ecologic approach to children in war zones. *Child and Adolescent Psychiatric Clinics of North America*, 17(3), 497-514. <https://doi.org/10.1016/j.chc.2008.02.004>.
- Borrell-Carrió, F., Suchman, A. L., & Epstein, R. M. (2004). The biopsychosocial model 25 years later: principles, practice, and scientific inquiry. *The Annals of Family Medicine*, 2(6), 576-582. DOI: <https://doi.org/10.1370/afm>
- Brajša-Žganec, A. (2005). The long-term effects of war experiences on children's depression in the Republic of Croatia. *Child Abuse & Neglect*, 29(1), 31-43. <https://doi.org/10.1016/j.chiabu.2004.07.007>
- Brondolo, E., Rieppi, R., Erickson, S. A., Bagiella, E., Shapiro, P. A., McKinley, P., & Sloan, R. P. (2003). Hostility, interpersonal interactions, and ambulatory blood pressure. *Psychosomatic Medicine*, 65(6), 1003-1011. <https://doi.org/10.1023/A:1025530711432>
- Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö., Karadeniz, Ş., & Demirel, F. (2008). *Bilimsel araştırma yöntemleri*.
- Carlson, M., Brennan, R.T., & Earls, F. (2012). Enhancing adolescent self-efficacy and collective efficacy through public engagement around HIV/AIDS competence: A multilevel, cluster randomized controlled trial. *Social science and Medicine*, 75(5), 1078–1087. <https://doi.org/10.1016/j.socscimed.2012.04.035>
- Carlson, M., Brennan, R. T., & Earls, F. (2012). Enhancing adolescent self-efficacy and collective efficacy through public engagement around HIV/AIDS competence: a multilevel, cluster randomized controlled trial. *Social science & medicine*, 75(6), 1078-1087. <https://doi.org/10.1016/j.socscimed.2012.04.035>
- Chida, Y., & Steptoe, A. (2009). The association of anger and hostility with future coronary heart disease: a meta-analytic review of prospective evidence. *Journal of the American College of Cardiology*, 53(11), 936–946. <https://doi.org/10.1016/j.jacc.2008.11.044>
- Cherewick, M., Doocy, S., Tol, W., Burnham, G., & Glass, N. (2016). Potentially traumatic events, coping strategies and associations with mental health and well-being measures among conflict-affected youth in the Eastern Democratic Republic of

- Congo. *Global health research and policy*, 1, 1-18. <https://doi.org/10.1186/s41256-016-0007-6>
- Coulter, C., Persson, M., & Utas, M. (2008). *Young female fighters in African wars: conflict and its consequences*. Nordiska Afrikainstitutet. <https://doi.org/10.1057/fr.2011.57>
- Corps, M. (2014). *Advancing adolescence: Getting Syrian refugee and host-community adolescents back on track*. <https://doi.org/10.1177/07435584211056069>
- Denov, M. (2010). Coping with the trauma of war: Former child soldiers in post-conflict Sierra Leone. *International Social Work*, 5(3), 791–806. <https://doi.org/10.1080/02615470500487085>
- Derluyn, I., & Broekaert, E. (2007). Different perspectives on emotional and behavioural problems in unaccompanied refugee children and adolescents. *Ethnicity and health*, 12(2), 141-162. <https://doi.org/10.1080/13557850601002296>
- Derluyn, I., Broekaert, E., & Schuyten, G. (2008). Emotional and behavioural problems in migrant adolescents in Belgium. *European child & adolescent psychiatry*, 17(1), 54-62.
- Devakumar, D., Birch, M., Osrin, D., Sondorp, E., & Wells, J. C. (2014). The intergenerational effects of war on the health of children. *BMC medicine*, 12(1), 1-15. <http://dx.doi.org/10.1136/archdischild-2014-306237.290>
- DeVylder, J., Fedina, L., & Link, B. (2020). Impact of police violence on mental health: A theoretical framework. *American journal of public health*, 110(11), 1704-1710. <https://doi.org/10.2105/AJPH.2020.305874>
- Detels, R., Beaglehole, R., Lansang, M. A., & Gulliford, M. (2011). *Oxford textbook of public health*. Oxford University Press.
- Dickson, K., & Bangpan, M. (2018). What are the barriers to, and facilitators of, implementing and receiving MHPSS programmes delivered to populations affected by humanitarian emergencies? A qualitative evidence synthesis. *Global Mental Health*, 5. <https://doi.org/10.1017/gmh.2018.12>
- Dossa, N. I., Zunzunegui, M. V., Hatem, M., & Fraser, W. D. (2015). Mental health disorders among women victims of conflict-related sexual violence in the Democratic Republic of Congo. *Journal of Interpersonal Violence*, 30(13), 2199-2220. <https://doi.org/10.1111/birt.12085>

- Dua, T., Barbui, C., Clark, N., Fleischmann, A., Poznyak, V., van Ommeren, M., Yasamy, M.T., Ayuso-Mateos, J.L., Birbeck, G.L., Drummond, & Saxena, S. (2011). Evidence-based guidelines for mental, neurological, and substance use disorders in low-and middle-income countries: summary of WHO recommendations. *PLoS medicine*, 8(11), e1001122. <https://doi.org/10.1371/journal.pmed.1001122>
- Dumke, L., Haer, R., Zawadka, A., Salmen, C., & Hecker, T. (2022). The role of violence perpetration in driving externalizing problems and offending behaviour among youth from the eastern Democratic Republic of Congo. *Journal of Traumatic Stress*, 35(6), 1696-1708.
<https://doi.org/10.1002/jts.22871>
- Dybdahl, R. (2001). Children and mothers in war: an outcome study of a psychosocial intervention program. *Child development*, 72(4), 1214-1230.
<https://doi.org/10.1111/1467-8624.00343>
- Dyregrov, A., Gupta, L., Gjestad, R., Guestnoheli, E. (2000). Trauma exposure and psychological reactions to genocide among Rwandan children. *Journal of traumatic stress*, 13(1), 3-21. <https://doi.org/10.1002/jts.20104>
- Ehnholt, K. A., & Yule, W. (2006). Practitioner Review: Assessment and treatment of refugee children and adolescents who have experienced war-related trauma. *Journal of Child Psychology and Psychiatry*, 47(12), 1197-1210..
<https://doi.org/10.1080/j.1440-1614.2005.01513>.
- Elbedour, S., Onwuegbuzie, A. J., Ghannam, J., Whitcome, J. A, Hein, F. A. (2007). Post-traumatic stress disorder, depression, and anxiety among Gaza Strip adolescents in the wake of the second Uprising (Intifada). *Child Abuse & Neglect*, 31(1), 719-729.
<https://doi.org/10.1016/j.chiabu.2005.09.006>
- Ertl, V., Pfeiffer, A., Schauer, E., Elbert, T., & Neuner, F. (2011). Community-implemented trauma therapy for former child soldiers in Northern Uganda: a randomized controlled trial. *Jama*, 306(5), 503-512. [10.1001/jama.2011.1060](https://doi.org/10.1001/jama.2011.1060)
- Farwell, N. (2003). In war's wake: contextualizing trauma experiences and psychosocial well-being among Eritrean youth. *International Journal of Mental Health*, 32(4), 20-50. <https://doi.org/10.1080/00207411.2003.11449596>
- Farhood, L., Zurayk, H., Chaya, M., Saadeh, F., Meshefedjian, G., & Sidani, T. (1993). The impact of war on the physical and mental health of the family: The Lebanese

- experience. *Social Science & Medicine*, 36(12), 1555-1567.
[https://doi.org/10.1016/0277-9536\(93\)90344-4](https://doi.org/10.1016/0277-9536(93)90344-4)
- Finkelhor, D. (1990). Early and long-term effects of child sexual abuse: An update. *Professional Psychology: Research and practice*, 21(5), 325-330.
<https://doi.org/10.1037/0735-7028.21.5.325>
- Gingerich, T., & Leaning, J. (2004). *The use of rape as a weapon of war in the conflict in Darfur, Sudan. Program on Humanitarian Crises and Human Rights, François-Xavier Bagnoud Center for Health and Human Rights*. Harvard School of Public Health
- Gupta, L., & Zimmer, C. (2008). Psychosocial intervention for war-affected children in Sierra Leone. *The British Journal of Psychiatry: The Journal of Mental Science*, 192(3), 212–216. <https://doi.org/10.1192/bjp.bp.107.038182>
- Hasanović, M. (2011). Psychological consequences of war-traumatized children and adolescents in Bosnia and Herzegovina. *Acta Medica Academica*, 40(1), 45-66. DOI: [10.5644/ama2006-124.8](https://doi.org/10.5644/ama2006-124.8)
- Hadi, F., Lai, B. S., & Llabre, M. M. (2014). Life outcomes were influenced by war-related experiences during the Gulf crisis. *Anxiety, Stress & Coping*, 27(2), 156-175.
<https://doi.org/10.1080/10615806.2013.832219>
- Harris, L. M. (2006). Irrigation, gender, and social geographies of the changing waterscapes of southeastern Anatolia. *Environment and Planning D: Society and Space*, 24(2), 187-213. <https://doi.org/10.1068/d03k>
- Hrabok, M., Delorme, A., & Agyapong, V. I. (2020). Threats to mental health and well-being associated with climate change. *Journal of Anxiety Disorders*, 7(6), 102-295.
<https://doi.org/10.1016/j.janxdis.2020.102295>
- Janoff-Bulman, R. (2004). Posttraumatic growth: Three explanatory models. *Psychological Inquiry*, 15(1), 30-34.: <https://www.jstor.org/stable/20447198>
- Johnson, K., Asher, J., Rosborough, S., Raja, A., Panjabi, R., Beadling, C., & Lawry, L. (2008). Association of combatant status and sexual violence with health and mental health outcomes in postconflict Liberia. *Jama*, 300(6), 676-690.
<https://doi.org/10.1001/jama.300.6.676>

- Jordans, M. J., & Tol, W. A. (2013). Mental health in humanitarian settings: shifting focus to care systems. *International Health*, 5(1), 9-10.
<https://doi.org/10.1093/inthealth/ihs005>
- Jordans, M. J., Tol, W. A., Komproe, I. H., Susanty, D., Vallipuram, A., Ntamatumba, P., Lasuba, A. C., & de Jong, J. T. (2010). Development of a multi-layered psychosocial care system for children in areas of political violence. *International Journal of Mental Health Systems*, 4(1), 1-12. <https://doi.org/10.1186/1752-4458-4-15>
- Jordans, M. J., Tol, W. A., Susanty, D., Ntamatumba, P., Luitel, N. P., Komproe, I. H., & de Jong, J. T. (2013). Implementation of a mental health care package for children in areas of armed conflict: a case study from Burundi, Indonesia, Nepal, Sri Lanka, and Sudan. *PLoS Medicine*, 10(1), 1001-371. <https://doi.org/10.1371/journal.pmed.1001371>
- Jordans, M. J., Komproe, I. H., Tol, W. A., Kohrt, B. A., Luitel, N. P., Macy, R. D., & De Jong, J. T. (2010). Evaluation of a classroom-based psychosocial intervention in conflict-affected Nepal: A cluster randomized controlled trial. *Journal of Child Psychology and Psychiatry*, 51(7), 818-826.
<https://doi.org/10.1111/j.1469-7610.2010.02209>
- Jordans, M., Tol, W., Komproe, I., & de Jong, J. (2009). Systematic Ra systematic evidence and treatment approaches Psychosocial and mental health care for children in war. *Child and Adolescent Mental Health*, 14, 2–14. *Journal of Conflict Resolution*, 5(5), 877–908.
<https://doi.org/10.1111/j.1475-3588.2008.00515>
- Kanagaratnam, P., Raundalen, M., & Asbjornsen, A.E. (2005). Ideological commitment and posttraumatic stress in former Tamil child soldiers. *Scandinavian Journal of Psychology*, 4(6), 511–520. <https://doi.org/10.1111/j.1467-9450.2005.00483>.
- Kessler, R. C., & Wang, P. S. (2008). The descriptive epidemiology of commonly occurring mental disorders in the United States. *Annu. Rev. Public Health*, 29, 115-129.
<https://doi.org/10.1146/annurev.publhealth.29.020907.090847>
- Keskinkılıç, K. (Ed.). (2016). *Türk eğitim Sistemi ve okul yönetimi*. Pegem A Yayıncılık.
- Khamis, V. (2005). Post-traumatic stress disorder among school-age Preschool-age children. *Child abuse & neglect*, 29(1), 81-95. <https://doi.org/10.1080/15402002.2015>

- Kieling, C., Baker-Henningham, H., Belfer, M., Conti, G., Ertem, I., Omigbodun, O., Rohde, L. A., Srinath, S., Ulkuer, N., & Rahman, A. (2011). Child and adolescent mental health worldwide: evidence for action. *Lancet*, *378*(9801), 1515–1525.
[https://doi.org/10.1016/S0140-6736\(11\)60827-1](https://doi.org/10.1016/S0140-6736(11)60827-1)
- Kirmayer, L. J. (2007). Psychotherapy and the cultural concept of the person. *Transcultural psychiatry*, *44*(2), 232-257.<https://doi.org/10.1177/1363461506070794>
- Kienzler, H. (2008). Debating war trauma and post-traumatic stress disorder (PTSD) in an interdisciplinary arena. *Social Science & Medicine*, *67*(2), 218-227.
<https://doi.org/10.1016/j.socscimed.2008.03.030>.
- Kohrt, B., & Hruschka, D. J. (2010). Nepali concepts of psychological trauma: The role of idioms of distress, ethnopsychology and the physiology suffering and preventing stigma. *Culture, Medicine, and Psychiatry*, *34*(2), 322–352.
<https://doi.org/10.1007/s11013-010-9170-2>
- Kohrt, B. A., Perera, E., Jordans, M. J. D., Koirala, S., Karki, R., Karki, R., & Kathmandu, P. E. (2010). *Psychosocial support model for children associated with armed forces and armed groups in Nepal*.
- Kohrt, B. A., Hruschka, D. J., Worthman, C. M., Kunz, R. D., Baldwin, J. L., Upadhaya, N., Acharya, N. R., Koirala, S., Thapa, S. B., Tol, W. A., Jordans, M. J. D., Robkin, N., Sharma, V. D., & Nepal, M. K. (2012). Political violence and mental health in Nepal: a prospective study. *The British Journal of Psychiatry: The Journal of Mental Science*, *201*(4), 268–275. <https://doi.org/10.1192/bjp.bp.111.096222>
- Kotrlik, J. W. K. J. W., & Higgins, C. C. H. C. C. (2001). Organizational research: Determining the appropriate sample size in survey research. *Information technology, learning, and performance journal*, *19*(1), 43. <https://ssrn.com/abstract=3224205>
- Lai, Y., Sun, H., & Ren, J. (2018). Understanding the determinants of big data analytics (BDA) adoption in logistics and supply chain management: An empirical investigation. *The International Journal of Logistics Management*.<https://doi.org/10.1108/BPMJ-02-2017-0046>
- Layne, C. M., Olsen, J. A., Baker, A., Legerski, J.-P., Isakson, B., Pasalić, A., Duraković-Belko, E., Dapo, N., Campara, N., Arslanagić, B., Saltzman, W. R., & Pynoos, R. S. (2010). Unpacking trauma exposure risk factors and differential pathways of influence: predicting postwar mental distress in Bosnian adolescents: Unpacking

- trauma exposure risk factors. *Child Development*, 81(4), 1053–1076.
<https://doi.org/10.1111/j.1467-8624.2010.01454.x>
- Lasley, T., & Thyne, C. (2015). Secession, legitimacy and the use of child soldiers. *Conflict Management and Peace Science*, 32(3), 289–308. <https://doi.org/10.1177/0738894214526541>
- Lee, S. H., Kim, E. J., Noh, J. W., & Chae, J. H. (2018). Factors associated with post-traumatic stress symptoms in students who survived 20 months after the Sewol ferry disaster in Korea. *Journal of Korean medical science*, 33(11). <https://doi.org/10.3346/jkms.2018.33.e90>
- Litz B. T. (2014). Resilience in the aftermath of war trauma: a critical review and commentary. *InterfaceFocus*, 4(5). <https://doi.org/10.1098/rsfs.2014.0008>
- Lokuge, K., Shah, T., Pintaldi, G., Thurber, K., Martínez-Viciano, C., Cristobal, M., Palacios, L., Dear, K., & Banks, E. (2013). Mental health services for children exposed to armed conflict: Médecins Sans Frontières' experience in the Democratic Republic of Congo, Iraq and the occupied Palestinian territory. *Paediatrics and International Child Health*, 33(4), 259–272.
<https://doi.org/10.1179/2046905513Y.0000000098>
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventory. *Behaviour research and therapy*, 33(3), 335-343. [https://doi.org/10.1016/0005-7967\(94\)00075-U](https://doi.org/10.1016/0005-7967(94)00075-U)
- Lustig, S. L., Kia-Keating, M., Knight, W. G., Geltman, P., Ellis, H., Kinzie, J. D., Keane, T., & Saxe, G. N. (2004). Review of child and adolescent refugee mental health. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(1), 24–36. <https://doi.org/10.1097/00004583-200401000-00012>
- Macy, R. D., Macy, D. J., Gross, S. I., & Brighton, P. (2003). Healing in familiar settings: support for children and youth in the classroom and community. *New Dir Youth Dev*, (98), 51-79. <https://doi.org/10.1002/pits.10109>
- McDonald, C. C., & Richmond, T. R. (2008). The relationship between community violence exposure and mental health symptoms in urban adolescents. *Journal of Psychiatric and Mental Health Nursing*, 15(10), 833-849. doi:10.1016/j.jadohealth.2012.02.010.

- McEvoy-Levy, S. (Ed.). (2006). *Troublemakers or peacemakers?: Youth and post-accord peacebuilding*. University of Notre Dame Press.
<https://doi.org/10.1080/14678800802095377>
- Mels, C., Derluyn, I., Broekaert, E., & Rosseel, Y. (2009). Screening for traumatic exposure and posttraumatic stress symptoms in adolescents in the war-affected eastern Democratic Republic of Congo. *Archives of paediatrics & adolescent medicine*, 163(6), 525-530. doi:10.1001/archpediatrics.2009.56.
- Miller, K. E., Omidian, P., Rasmussen, A., Yaqubi, A., & Daudzai, H. (2008). Daily stressors, war experiences, and mental health in Afghanistan. *Transcultural Psychiatry*, 45(4), 611–638. <https://doi.org/10.1177/1363461508100785>
- Muhorakeye, O., & Biracyaza, E. (2021). Exploring barriers to mental health services utilization at Kabutare district hospital of Rwanda: Perspectives from patients. *Frontiers in Psychology*, 1(2), 638-377. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.638377>
- Murphy, W. P. (2003). Military patrimonialism and child soldier clientelism and Sierra Leonean civil wars. *African Studies Review*, 46(2), 61-87.
 DOI: <https://doi.org/10.2307/1514826>
- Murray, J. S. (2010). Responding to the psychosocial needs of children and families in disasters. *Critical Care Nursing Clinics*, 22(4), 481-491.
<https://doi.org/10.1016/j.ccell.2010.09.002>
- Murray, L. K., Familiar, I., Skavenski, S., Jere, E., Cohen, J., Imasiku, M., & Bolton, P. (2013). An evaluation of trauma-focused cognitive behavioural children in Zambia. *Child abuse & neglect*, 37(12), 1175-1185.
<https://doi.org/10.1016/j.chiabu.2013.04.017>
- Neela Ghoshal. (2009). *Pursuit of power: Political violence and repression in Burundi*. Human Rights Watch. <https://doi.org/10.1093/afraf/adv045>
- Neuner, F., Catani, C., Ruf, M., Schauer, E., Schauer, M., & Nordenstedt, H., & Rosling, H. (2016). Chasing 60% of maternal deaths in the post-fact era. *Lancet* 388,(10054), 1864-1865. DOI: [10.1016/s0140-6736\(16\)31793-7](https://doi.org/10.1016/s0140-6736(16)31793-7)
- Neuner, F., Catani, C., Ruf, M., Schauer, E., Schauer, M., & Elbert, T. (2008). Narrative exposure therapy for the treatment of traumatized children and adolescents (KidNET): from neurocognitive theory to field intervention. *Child and adolescent*

- psychiatric clinics of North America*, 17(3), 641-664. <https://doi.org/10.1016/j.chc.2008.03.001>
- Newman, A., Schwarz, S., & Borgia, D. (2014). How does microfinance enhance entrepreneurial outcomes in emerging economies? The mediating mechanisms of psychological and social capital. *International Small Business Journal*, 32(2), 158-179. <https://doi.org/10.1177/0266242613485611>
- Nyarko, F., & Punamäki, R. L. (2021). The content and meaning of war experiences: A qualitative study of trauma and resilience among Liberian young refugees in Ghana. *Transcultural Psychiatry*, 58(2), 254-267. doi:10.1177/1363461520901636
- Okello, J., Onen, T., & Musisi, S. (2007). Psychiatric disorders among war-abducted and non-abducted adolescents in Gulu district, Uganda: A comparative study. *African Journal of Psychiatry*, 10(4), 225–231. <https://hdl.handle.net/10520/EJC72639>
- Ossiannilsson, E., Altinay, F., & Altinay, Z. (2015). Analysis of MOOCs practices from the perspective of learner experiences and quality culture. *Educational Media International Journal*, 52(4), 272-283. <https://doi.org/10.1080/09523987.2015.1125985>
- Osokina, O., Silwal, S., Bohdanova, T., Hodes, M., Sourander, A., & Skokauskas, N. (2023). Impact of the Russian invasion on the mental health of adolescents in Ukraine. *Journal of the American Academy of Child & Adolescent Psychiatry*, 62(3), 335-343. <https://doi.org/10.1016/j.jaac.2022.07.845>.
- Paardekooper, B., De Jong, J. T. V. M., & Hermanns, J. M. A. (1999). The psychological impact of war and the refugee situation on South Sudanese children in refugee camps in Northern Uganda: an exploratory study. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 40(4), 529-536. <https://doi.org/10.1111/1469-7610.00471>
- Pallant, J. F., & Bailey, C. M. (2005). Assessment of the structure of the Hospital Anxiety and Depression Scale in musculoskeletal patients. *Health and quality of life outcomes*, 3(1), 1-9. <https://doi.org/10.1186/1477-7525-3-82>
- Panter-Brick, C., Goodman, A., Tol, W., & Eggerman, M. (2011). Mental health and childhood adversities: a longitudinal study in Kabul, Afghanistan. *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(4), 349-363. <https://doi.org/10.1016/j.jaac.2010.12.001>

- Pate, K. M. (2021). Understanding Post-Traumatic Stress Disorder in Children: A Comprehensive Review. *Inquiries Journal*, 13(02).
<https://digitalcommons.usf.edu/honorsthesis>
- Pechenkina, A. O., & Argo, N. (2020). How do civilians assign blame and praise amidst civil conflict? *Behavioural sciences of terrorism and political aggression*, 12(4), 243-267. <https://doi.org/10.1080/19434472.2019.1691248>
- Pedersen, D. (2002). Political violence, ethnic conflict, and contemporary wars: broad implications for health and social well-being. *Social science & medicine*, 55(2), 175-190. [https://doi.org/10.1016/S0277-9536\(01\)00261-1](https://doi.org/10.1016/S0277-9536(01)00261-1)
- Penta, S., Correia, S., Schneider, M. A., Holshausen, K., Nicholson, A. A., Haefner, S. A., ... & Hatchard, T. (2022). Sex and gender in treatment response to dialectical behaviour therapy: current knowledge, gaps, and future directions. *the Cognitive Behaviour Therapist*, 15, e30.
<https://doi.org/10.1017/S1754470X22000253>
- Peters, K., & Richards, P. (1998). 'Why we fight': *Voices of youth combatants in Sierra Leone*. *Africa*, 68(2), 183-210. <https://doi.org/10.2307/1161278>
- Pham, P. N., Weinstein, H. M., & Longman, T. (2004). Trauma and PTSD symptoms in Rwanda: implications for attitudes toward justice and reconciliation. *Jama*, 292(5), 602-612. [10.1001/jama.292.5.602](https://doi.org/10.1001/jama.292.5.602)
- Porter, M., & Haslam, N. (2005). Predisplacement and post-displacement displacement cited with mental health of refugees and internally displaced persons: a meta-analysis. *Jama*, 294(5), 602-612. [doi:10.1001/jama.294.5.602](https://doi.org/10.1001/jama.294.5.602)
- Rahman, A., Hamdani, S. U., Awan, N. R., Bryant, R. A., Dawson, K. S., Khan, M. F., ... & Van Ommeren, M. (2016). Effect of a multicomponent behavioural intervention in adults impaired by psychological distress in a conflict-affected area of Pakistan: a randomized clinical trial. *Jama*, 316(24), 2609-2617. [10.1001/jama.2016.17165](https://doi.org/10.1001/jama.2016.17165)
- Ramon, S., Campbell, J., Lindsay, J., McCrystal, P., & Baidoun, N. (2006). The impact of political conflict on social work: Experiences from Northern Ireland, Israel, and Palestine, one. *British Journal of Social Work*, 36(3), 435-450.
<https://doi.org/10.1093/bjsw/bcl009>

- Rugema, L., Mogren, I., Ntaganira, J., & Krantz, G. (2015). Traumatic episodes and mental health effects in young men and women in Rwanda, 17 years after the genocide. *BMJ Open*, 5(6). <http://dx.doi.org/10.1136/bmjopen-2014-006778>
- Santacruz, M.L. & Arana, R. E. (2002). Experiences and psychosocial impact of the El Salvador civil war on child soldiers. *Biomedical*, 22(2), 283–397. <https://doi.org/10.1525/eth.2002.30.4.327>
- Scrimin, S., Moscardino, U., Capello, F., Altoè, G., Steinberg, A. M., & Pynoos, R. S. (2011). Trauma reminders and PTSD symptoms in children three years after a terrorist attack in Beslan. *Social Science & Medicine*, 72(5), 694-700. <https://doi.org/10.1016/j.socscimed.2010.11.030>
- Specht, J., McGhie-Richmond, D., Loreman, T., Mirenda, P., Bennett, S., Gallagher, T, Gabrielle & Cloutier, S. (2016). Teaching in inclusive classrooms: Efficacy and beliefs of Canadian preservice teachers. *International Journal of Inclusive Education*, 20(1), 1-15. <https://doi.org/10.1080/13603116.2015.1059501>
- Slone, M., & Shoshani, A. (2022). Effects of war and armed conflict on adolescents' psychopathology and well-being: measuring political life events among youth. *Terrorism and political violence*, 34(8), 1797-1809. DOI: [10.1080/09546553.2020.1839427](https://doi.org/10.1080/09546553.2020.1839427)
- Srinivasa Murthy, R. (2007). Mass violence and mental health--Recent epidemiological findings. *International Review of Psychiatry*, 19(3), 183-192. <https://doi.org/10.1080/09540260701365460>
- Stein, M. D. (1999). Medical consequences of substance abuse. *Psychiatric Clinics of North America*, 22(2), 351-370. [https://doi.org/10.1016/S0193953X\(05\)70081-2](https://doi.org/10.1016/S0193953X(05)70081-2)
- Silove, D., Liddell, B., Rees, S., Chey, T., Nickerson, A., Tam, N., ... & Steel, Z. (2014). Effects of recurrent violence on post-traumatic stress disorder and severe distress in conflict-affected Timor-Leste: a 6-year longitudinal study. *The Lancet Global Health*, 2(5), 293-300. [https://doi.org/10.1016/S2214-109X\(14\)70196-2](https://doi.org/10.1016/S2214-109X(14)70196-2)
- Silwal, S., Dybdahl, R., Chudal, R., Sourander, A., & Lien, L. (2018). Psychiatric symptoms experienced by adolescents in Nepal following the 2015 earthquakes. *Journal of affective disorders*, 2(34), 239-246. <https://doi.org/10.1016/j.jad.2018.03.002>

- Thabet, A. A., El-Buhaisi, O., & Vostanis, P. (2014). Trauma, PTSD, Anxiety and Coping Strategies among Palestinians Adolescents Exposed to War in Gaza. *The Arab Journal of Psychiatry*, 44(1152), 1-24. <https://doi.org/10.1016/j.chiabu.2005.09.006>
- Thabet, A. A., & Thabet, S. (2018). Psychosocial problems in refugee children victims of community violence in Gaza Strip. *Int J Neurol Nursing*, 4(1), 2456-5229. <http://dx.doi.org/10.17140/PCSOJ-3-122>
- Thabet, A. A., Tawahina, A. A., El Sarraj, E., & Vostanis, P. (2008). Exposure to war trauma and PTSD among parents and children in the Gaza strip. *European Child & Adolescent Psychiatry*, 17(4), 191-199. <https://doi.org/10.1007/s00787-007-0653-9>
- Thulin, E. J., McLean, K. E., Sevalie, S., Akinsulure-Smith, A. M., & Betancourt, T. S. (2022). Mental health problems among children in Sierra Leone: Assessing cultural concepts of distress. *Transcultural Psychiatry*, 59(4), 461-478. <https://doi.org/10.1177/1363461520916695>
- Tol, W. A., Barbui, C., Galappatti, A., Silove, D., Betancourt, T. S., Souza, R., Ann Golaz & Van Ommeren, M. (2011). Mental health and psychosocial support in humanitarian settings: linking practice and research. *The Lancet*, 378(9802), 1581-1591. [https://doi.org/10.1016/S0140-6736\(11\)61094-5](https://doi.org/10.1016/S0140-6736(11)61094-5)
- Tol, W. A., Komproe, I. H., Jordans, M. J., Gross, A. L., Susanty, (2010). Mediators and moderators of a psychosocial intervention for children affected by political violence. *Journal of consulting and clinical psychology*, 78(6), 818-822 <https://doi.org/10.1037/a0021348>.
- Tol, W. A., Song, S., & Jordans, M. J. (2013). Annual research review: Resilience and mental health in children and adolescents living in areas of armed conflict—a systematic review of findings in low-and middle-income countries. *Journal of child psychology and psychiatry*, 54(4), 445-460. <https://doi.org/10.1111/jcpp.12053>
- Ward, J., & Marsh, M. (2006). Sexual violence against women and girls in war and its aftermath: Realities, responses and required resources. *Symposium on Sexual Violence in Conflict and Beyond*, 21.
- Wessells, M., & Jonah, D. (2006). Recruitment and reintegration of former youth soldiers in Sierra Leone: Challenges of reconciliation and post-accord peacebuilding. *Troublemakers or peacemakers*, 27-47.

Yin, Z. (2003). On the Cauchy problem for an integrable equation with peakon solutions.

Illinois Journal of Mathematics, 47(3), 649-

666. <https://doi.org/10.1215/ijm/1258138186>

Zack-Williams, T. B. (2006). Child Soldiers in Sierra Leone and the problems of demobilization, and reintegration into Society: Some Lessons for Social Workers in war-torn societies. *Social Work Education*, 25(2), 119-128.

<https://doi.org/10.1080/02615470500487085>

Appendices

Appendix A: Permission to Use the Ryff PWB Scales

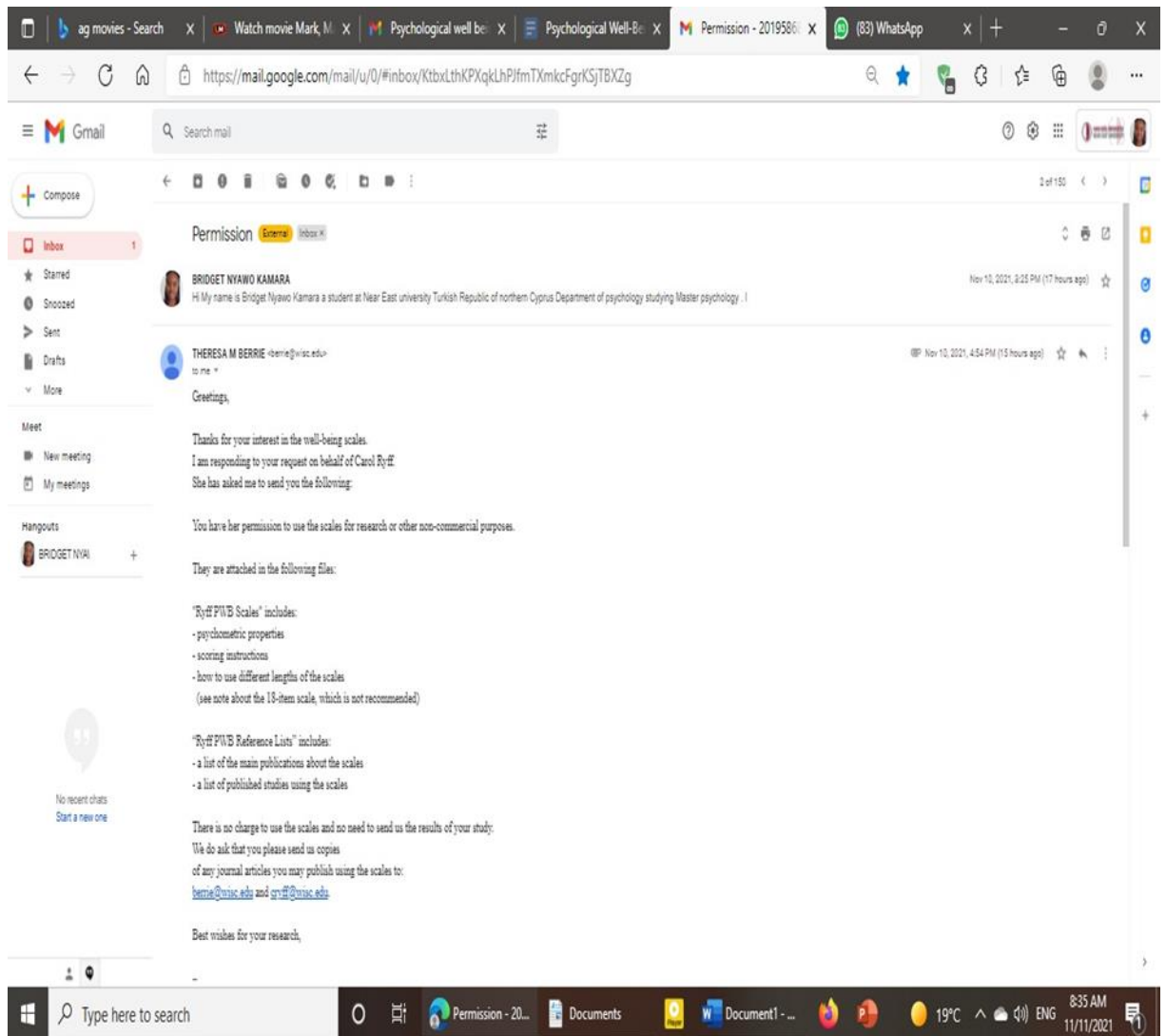


Figure 1. Permission to Use the Ryff PWB Scales

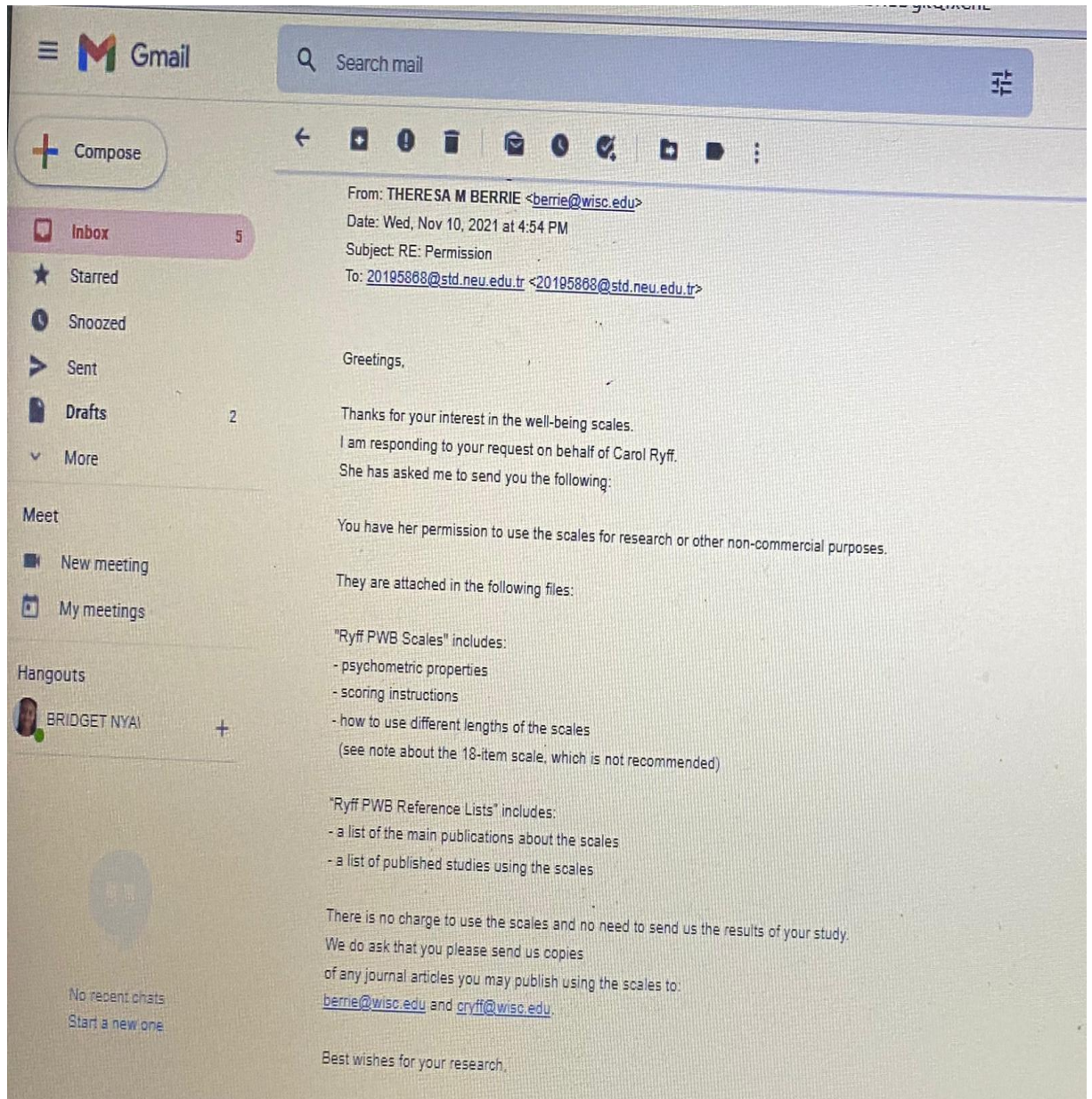


Figure 2. Permission to Use the Ryff PWB Scales 2

Appendix B: Inform consent

Dear Participant,

You are invited to participate in a research study being carried out to investigate the prevalence of PTSD amongst war-affected adolescents, whilst evaluating their rehabilitation processes.

The questionnaire will require just 10 minutes to complete. Participation in the study is voluntary and will not affect you in any way if you refuse to participate. The data collected will only be used for academic purposes and no identifying data will be collected or included in the write-up. You are free to withdraw from the study at any time by contacting the researchers. Thereafter, your data will be deleted from the research database. If you have concerns about the study, please contact us through the communication channels provided below.

Bridget Nyawo Kamara
 Psychology Department
 Near East Universit
20195868@std.neu.edu.tr

Dr Gloria Manyeruke
 Psychology Department
 Near East Universit
gloriamanyeruke@neu.ed.tr

By signing below, you agree to take part in the study

Signature.....Date.....

Sociodemographic Form

1. Gender:
 - a) Female
 - b) Male
2. Age (Please Specify):

3. Place of Birth (Region):
 - a) Eastern
 - b) Northern
 - c) Western
 - d) Southern
4. Tribe (Please Specify):

5. Place of residence (Please Specify according to regions):

6. In what part of the country have you lived the longest period (Please specify according to the different regions)?

7. What is your level of education?
 - a) Primary
 - b) Secondary
 - c) Vocational
 - d) Tertiary
 - e) Other (Please Specify)

8. What is the occupation of your father? (Please Specify)

9. What is the occupation of your mother? (Please Specify)

10. What is the educational level of your father? (Please circle one)
 - a) He can't read or write
 - b) He has done some schooling years
 - c) He has completed primary school
 - d) he has completed secondary school or vocational school
 - e) he holds a college degree
11. What is the educational level of your mother? (Please check one)
 - a) she can't read or write
 - b) she has done some schooling years
 - c) she has completed primary school
 - d) she has completed secondary school or vocational school
 - e) she holds a college degree

War experiences

The section below provides information on experiences encountered during the war period in Sierra Leone.

1. Have you ever been forced to change residence or schools(i.e. because of shelling, looting, intimidation, food shortage etc.) during the war?

YES NO I DON'T KNOW

If YES, please indicate the type and frequency of change, and your age the first time it happened:

Type of Change	How many times	Your age
<input type="checkbox"/> residence change	_____	_____
<input type="checkbox"/> school change	_____	_____

2. Have you ever been forced to live in another country because of the war (i.e., because of combat, looting, displacement" intimidation, food shortage, etc.)?

YES NO I DON'T KNOW

YES NO I DON'T KNOW

If YES, please list those countries, and indicate your age at the time:

Country	Your age
_____	_____

1. Have you ever been forced to separate from your parents or "other parent" because of the war? (Please check the appropriate boxes)

YES from father or "other father"

YES from mother or "other mother"

YES from mother/"other mother" and father/"other father"

at same time

NO

I DON'T KNOW

If YES, please indicate the reason for the separation, how often it happened, and your age the first time it happened

PWB

Please read each statement and tick a number 1, 2, 3, 4, 5, 6 or 7 which is an indication of how you feel about yourself and your life. Please remember that there are no right or wrong answers.

Do not spend too much time on any statement. The rating scale is as follows:

1 = Strongly disagree

2 = disagree

3 = slightly disagree

4 = Neither agree nor disagree

5 = Slightly agree

6 = Agree

7 = Strongly agree

	1	2	3	4	5	6	7
1. I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.							
2. In general, I feel I am in charge of the situation in which I live.							
3. I am not interested in activities that will expand my horizons							
4. Most people see me as loving and affectionate							

PCL-C

Please read each statement and tick a number 1, 2, 3, 4, or 5 which is an indication of how much you have been bothered by a symptom in the last month. Please remember that there are no right or wrong answers. Do not spend too much time on any statement. The rating scale is as follows:

1 = Not at all

2 = A little bit

3 = Moderately

4 = Quite a bit

5 = Extremely

	1	2	3	4	5
1. Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?					
2. Repeated, disturbing dreams of a stressful experience from the past?					
3. Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?					
4. Feeling very upset when something reminded you of a stressful experience from the past?					

Appendix C: Ethical Approval From



BİLİMSEL ARAŞTIRMALAR ETİK KURULU

09.03.2022

Dear Bridget **Nyawo** Kamara

Your application titled “**The Impact of War Experiences on psychological wellbeing among Adolescents**” with the application number NEU/SS/2022/1251 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee

Note: If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.

Appendix D: Turnitin Similarity Report

Turnitin Originality Report

- Processed on: 10-Feb-2023 10:34 EET
- ID: 2010792630
- Word Count: 13832
- Submitted: 1

thesis 2 By Bridget 2 Bridget 2

Similarity Index: 14%

Similarity by Source

Internet Sources: 8%

Publications: 9%

Student Papers: 4%

2% match (Elvira Duraković-Belko. "Determinants of posttraumatic adjustment in adolescents from Sarajevo who experienced war", Journal of Clinical Psychology, 01/2003)

[Elvira Duraković-Belko. "Determinants of posttraumatic adjustment in adolescents from Sarajevo who experienced war", Journal of Clinical Psychology, 01/2003](#)

1% match (Denov, M.. "Coping with the trauma of war: Former child soldiers in post-conflict Sierra Leone", International Social Work, 2010.)

[Denov, M.. "Coping with the trauma of war: Former child soldiers in post-conflict Sierra Leone", International Social Work, 2010.](#)

1% match (Internet from 15-Mar-2013)

<http://onlinelibrary.wiley.com/store/10.1111/j.1469-7610.2012.02620.x/asset/j.1469-7610.2012.02620.x.pdf;jsessionid=E9B104DFFF644F8B7E72854D34E047BD.d01t03?v=1&t=hebi908q&s=55dba3b465e431a5742ef34748434c21e9af343d>

1% match (Internet from 17-Jan-2023)

<https://worldwidescience.org/topicpages/p/psychological+well-being+scales.html>

1% match (Michelle Slone, Anat Shoshani. "Effects of War and Armed Conflict on Adolescents' Psychopathology and Well-Being: Measuring Political Life Events among Youth", Terrorism and Political Violence, 2021)

[Michelle Slone, Anat Shoshani. "Effects of War and Armed Conflict on Adolescents' Psychopathology and Well-Being: Measuring Political Life Events among Youth", Terrorism and Political Violence, 2021](#)

< 1% match (Internet from 20-Dec-2013)

<http://onlinelibrary.wiley.com/doi/10.1111/j.1469-7610.2012.02620.x/full>

< 1% match (Internet from 01-Feb-2023)

https://www.researchgate.net/publication/249730316_Coping_with_the_trauma_of_war_For_mer_child_soldiers_in_post-conflict_Sierra_Leone

< 1% match (Internet from 01-Feb-2023)

https://www.researchgate.net/publication/237058490_Group_trauma-focused_cognitive-behavioural_therapy_with_former_child_soldiers_and_other_war-affected_boys_in_the_DR_Congo_A_randomised_controlled_trial

< 1% match (Internet from 30-Jan-2023)

Appendix E: CURRICULUM VITAE

PERSONAL DETAILS

Name:	BRIDGET NYAWO KAMARA
Date of Birth:	2nd January 1999
Place of Birth	Gbangnatoke Moyamba District
Marital Status	Singel
Nationality	Sierra Leonean
Address:	2A Vincent Drive, Freetown
Phone no:	+905338483706
E-mail:	bridgetkamara2017@gmail.com

EDUCATIONAL QUALIFICATIONS

- MSc General Psychology - Near East University Graduate School of Social Sciences- 2023 North Cyprus Mersin, Turk
- BSc. Social Work (2020) - Fourah Bay College, University of Sierra Leone (USL), Freetown, Sierra Leone
- West African Senior Secondary Cert. Examination (WASSCE) - Bishop Johnson Memorial Sch. 2013 Sierra Leone

- **WORK EXPERIENCE**

2018- 2019 - Don Bosco Fambul, Freetown, Sierra Leone

2018 - 2018 - Children advocacy network, Sierra Leone

2017-2017 – Sierra Leone Red Cross Society Sierra Leone