

**AN INVESTIGATION OF THE RELATIONSHIP BETWEEN INTERNAL AND
EXTERNAL FACTORS AND RESILIENCE OF INTERNALLY DISPLACED
PERSONS AFTER THE EXPERIENCE OF TRAUMA: A CASE STUDY OF
KIAMBAA VILLAGE IN ELDORET EAST SUB-COUNTY IN UASIN GISHU
COUNTY, KENYA**

By

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SUMMARY

The purpose of this study was to investigate factors that influence resilience after trauma among internally displaced persons in Kiambaa village, Uasin Gishu County, Kenya. The rationale, the problem statement, the objectives as well as the research questions and the theoretical framework were presented in chapter one. The theoretical concepts of Richardson's "meta-theory of resilience and resiliency" and Joseph and Linley "organism valuing theory" guided this study. The problem statement posited revealed that when people experience tragic events such as violence they get traumatized. Despite this, there are individuals who are able to adopt and bounce back with minimal disruptions to their lives, a factor referred to as resilience. Chapter two presented related literature by reviewing empirical research studies on the internal and external factors that contribute to resilience after trauma.

Chapter three discussed the methodology of the study. The study adopted a mixed design approach. The target population for this study was 50. It comprised all individuals who were victims of the fire tragedy at Kiambaa village. Twenty two respondents for this study were selected from the target population using purposive and snow ball sampling techniques. Questionnaires and unstructured interview schedule were the main tools of data collection. The Big Five Inventory (BFI) by John, Donahue, & Kentle, (1991) personality were used to classify respondents' personalities. The 25 item Connor-Davidson Resilience Scale 25 (CD-RISC-25) (used with permission) (Connor, & Davidson, 2003) was used to measure the resilience levels of the respondents. Means and Standard deviations were computed to quantify the amount of variation or dispersion of resilience among the respondents. Responses from research tools were cleaned, coded and entered into Statistical Package for Social Sciences (SPSS) for analysis. Descriptive data were organized into themes and categories and presented according to the objectives of the study. Pearson product moment correlation analysis, Chi square correlation analysis and Spearman rank correlation analysis were computed to establish the relationships between study variables.

Chapter four presented findings in form of tables, cumulative frequency counts, graphs and charts. The major findings of the study were as follows: The internal factors that contribute to resilience in individuals were age, gender and personality. However, gender had a greater influence on individuals' resilience levels. Other factors included personality and age. The main external factors that contributed to resilience in individuals of the fire tragedy at Kiambaa were spirituality and social support. The results of a Pearson correlation analysis confirmed a strong positive correlation between social support and resilience of individuals ($r=0.835$, $p<0.05$). Chapter five presented conclusions arising from the findings which indicated that age, gender, personality, spirituality and social support are significant internal and external factors that influence resilience levels of individuals. The study recommends that there is need for professionals working with traumatized individuals to be more familiar with these factors that contribute to resilience. The researcher also recommends that there is need to extend the present study by including other potentially important variables such as a wider range of psychosocial resources or health-related variables. Understanding the influence and importance of these variables may help to clarify the role of resilience in post-disaster adaptation. In addition, the researcher recommends that there is need to further extend the study to investigate the relationship between psychological resilience and another positive outcome, such as posttraumatic growth (PTG).

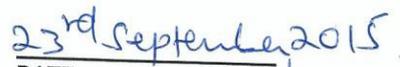
Key Terms: Resilience, Trauma, Internally Displaced Person, Age, Gender, Personality, Spirituality and Social Support. Kenya.

DECLARATION

Student Number - 46001077

I declare that **An Investigation of the Relationship between Internal and External Factors and Resilience of Internally Displaced Persons after the Experience of Trauma: a Case Study of Kiambaa Village in Eldoret East Sub-County in Uasin Gishu County, Kenya** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.


SIGNATURE
(Ms)


DATE

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LIST OF ACRONYMS AND ABBREVIATIONS

CD-RISC-25	- Connor-Davidson Resilience Scale 25
IDP	- Internally Displaced Persons
IOM	- International Organization for immigration
KRCS	- Kenya Red Cross Society
NGO	- Non-Governmental Organization
UN	- United Nations
UNRA	- United Nations Refugee Agency
VCT	- Voluntary Counseling and Testing

CHAPTER ONE

INTRODUCTION

1.1 MOTIVATION OF THE STUDY

This chapter outlines the motivation for the study by particularly highlighting the background information regarding the meaning of resilience in the context of trauma among internally displaced persons. The link between spirituality and resilience is also explained. Furthermore, the problem statement of the study, research aim, objectives of the study, research questions, research hypothesis, rationale and theoretical framework are discussed.

When people experience tragic events such as violence they get traumatized. Most of them are not able to carry out their normal routine tasks (Robert, 2005). They experience a wide range of reactions, positive and negative. Their strengths and abilities increase and decrease making it possible to gain control of their lives differently.

Trauma has been defined as an emotional response to horrific event such as accident, rape or natural disaster (Rowell & Thomley, 2013). Immediately after the event, shock and denial are typical and long term reactions include unpredictable emotions, flashback, strained relationships and even physical symptoms such as headaches and nausea. These feelings are normal but in some circumstances people have difficulties and are unable to move on with their lives and may need physical and psychological help to cope (Kevin & Rebecca, 2013). When an individual's emotions are stripped away by adversity, the effects are felt by the family, community and society at large and thus it is an important aspect to understand trauma broadly (Gonge, 2012). It can be an overwhelming concept and it affects individuals, families and communities. Successful treatment and interventions of trauma requires the incorporation of family members, peer groups and the community members at large.

Individuals experience traumatic events in various ways, some individuals develop post-traumatic stress disorder (PTSD), while others respond through denial of the severity of the event (Leaman & Gee, 2011)

After violence, people will most likely face challenges and experience significant psychological, social, vocational and emotional difficulties. Despite these challenges, there are individuals who are able to adopt and bounce back with minimal disruption to their lives. Others are eventually able to recover close to their pre-trauma level of functioning, though this is rare (Curtis & Nelson, 2003). Although their present functioning may not be exactly as it was in pre-trauma, a new baseline can be established where the survivors learn new skills and ways to cope with the situations. Resilience lies in the power of recovery and in the ability to return once again to those patterns of adaptations and competence that characterized the individual prior to the pre-stress period (Garnezy, 1985). Resilience comes from the Latin word “resalire” (to rise up again) and refers to the ability to bounce back or cope successfully despite substantial adversity (Earvolino-Ramirez, 2007). It is the ability to cope with changes and challenges and to “bounce back” during difficult times. Resilience has also been described as dynamic process encompassing positive adaptation within the context of significant adversity (Luthar, Cincchetti & Becker, 2000). Resilience is embedded within the notion of two critical circumstances, exposure to significant threat or severe adversity and the achievement of positive adaptation despite major assaults on the life process of the individual. Therefore, resilience is viewed as a process which contributes to positive outcomes (ibid).

The availability of social support from family, friends and professionals may boost the recovery of the person (Seeman, 2008). This support helps the victim to come to terms with certain aspects of their tragedy. The more support an individual receives the more resilient

they can become. In studies with children affected by mental disorders, Armstrong *et al.* (2005) assert that social support contributed to their recovery. Other factors that may promote resilience in individuals include hardiness, autonomy, and self-confidence (Zautra *et al.*, 2010). According to Maddi and Khoshaba (2008), hardiness comprises of elements such as finding a purpose in life, and also positive and negative experiences that promote growth opportunities. Hardiness also involves one's ability to influence and change their environment. Positive personal identity allows a person to stay focused after the traumatic event. These individuals adapt and adjust to the difficult situations and this gives them a better chance of coping. Social support is therefore an important factor that boosts recovery after trauma and enables individuals to be resilient.

1.1.1 The Link between Spirituality and Resilience

Spirituality has been defined as the continuous journey people take to discover and realize their essential self (Sweeney *et al.*, 2007). It is the process of searching for sacredness in one's life (Pargament, 2007). People can develop spiritual perspectives by taking different pathways such as nature, music, exercise, loving relationship, and scientific exploration, religion, art and philosophy. All these pathways can be termed sacred or divine by individuals in different circumstance and can help them enhance their spiritual well-being. Spirituality reframes perception and is important in the way behaviour is constituted (Julio *et al.*, 2008). This study explored some of the paths people follow to grow spiritually and how it helps them become resilient in traumatic events.

The connection between spirituality and resilience is that a resilient world view is characterized by feelings of confidence in life and one's self (Kass & Kass, 2000). This means that, in times of crisis or stress, people feel connected to a sense of meaning and purpose in their life, and are confident that they will be able to meet this challenge. Kass and Kass

(2000) further observe that one of the most valuable inner resources that people can develop is their own spirituality. Spirituality is an effective way to build a worldview. Spirituality is not the only way to develop resilient attitudes; however, for countless generations and countless cultures, it has been a primary source of resilience for individuals, families and communities.

Kass and Kass (ibid.) further argue that the essence of spirituality is not whether - or how often – one attends religious services; rather, it is the way that one experiences life. Spirituality is the experience of connection to the sacred aspect of life, that is, the spirit of life. Kass and Kass further point out that: As awareness of your connection to the spirit of life grows, you may find yourself developing an important skill: the ability to respond to crises and stress with personal empowerment, inner peace, clarity of thought, and life purpose. The connection to the spirit of life can help you become a more resilient person who can respond to stress with confidence in life and self (Kass&Kass, 2000, p. 6). From the foregoing observations by Kass and Kass, it is clear that there is a strong link between spirituality and resilience. Therefore, this relationship will be explored in the context of this study.

1.1.2 Case study

A case study is a strategy of investigating a phenomenon within its real-life context (Yin, 2003). According to Churchill and Brown (2007, p. 93), “Case analysis [study] involves the [intensive] study of selected examples or cases of the phenomenon about which insights are needed.” Kent (2009,) further observes that “A case is the entity whose characteristics are being recorded in the process of data construction. The case may be an object, a person, a survey respondent, a group of people, an organization, a situation, a geographical area or an event.” In this regard, this study investigated the factors that contributed to resilience after trauma among the internally displaced Persons in Kiambaa village, Eldoret East District,

Uasin Gishu County, Kenya. The case study targeted the victims of Kiambaa village after the fire tragedy and specifically narrowed itself into answering the questions ‘Where? What? How? and When? Data collection occurred over a sustained period of three months (Cresswel, 2009).

1.2 PROBLEM STATEMENT

Trauma after adversity affects an individual’s life, the lives of families and the entire community. Traumatized individuals experience hardship and distress. In conflict situations, they may go through moments of turmoil and severe loss of loved ones and property. Despite these turmoil research shows that many of them thrive or “bounce back” following the adversity and develop inner strength, competence, optimism and ability to cope effectively with the adversity they are facing (Wagnild & Collins, 2009). They become resilient due to internal and external factors and the current study focuses on the factors that contributed to resilience after trauma in a sample of individuals who experienced a fire tragedy. These internal and external factors are important in assessing strengths and protective factors and also help in developing innovative prevention and intervention programs for traumatized individuals. In their study on assessing strengths, resilience and growth Tedeschi and Kilmer, (2005) indicated that internal qualities such as optimism, adaptability and perseverance help individuals in adversity cope and survive. A belief in one’s own inner strength to deal with life’s challenges (Brough, Gorman, Ramirez & Westoby, 2003), positive attitudes, and hope for a good future has helped individuals cope (Khawaja, White, Schweitzer & Greenslade, 2008). There is also evidence from studies that show that determination to cope assists people to take control, rather than being a victim of the adverse situations (Gorman, Brough & Ramirez, 2003). Studies have also shown that resilience is evident in individuals: male and female, children, adolescence, adults and the aged (Bonanno, 2004).

Social support is an important external factor that can contribute to resilience after trauma. Studies have emphasized the importance of family, friends and community in contributing to resilience. In a qualitative study, Bosnian refugee women cited the support received from their spouses, children and family as a key factor in building their resilience (Sossou, Craig, Ogren & Schnak, 2008). This study examined how social support contributed to resilience.

Several studies have shown that spirituality in its various forms is linked to enhancing a person's psychological and physical wellbeing (Green & Elliot, 2010). A study on orphans suggested that spirituality encouraged cognitive restructuring, acceptance of the trauma, cultivated a sense of control and the rituals increased integration in the broader community (Fernando & Ferrari, 2011). Another study found that some refugees resigned themselves to the situation, and believed fate was out of their hands and in God's hands (Khawaja *et al.*, 2008). The question is: What are the internal factors that facilitate resilience among the victims of trauma? There seem to be no studies on internal and external factors that contribute to resilience after fire tragedy; this study will hopefully close the gap.

1.3 RESEARCH AIM

This study aimed at assessing the factors that contribute to resilience after trauma among survivors of a fire tragedy.

1.4 OBJECTIVES OF THE STUDY

1. To establish internal factors that influenced resilience among victims of the fire tragedy in Kiambaa village in Eldoret East District of Uasin Gishu County.
2. To establish external factors that influenced resilience among victims of the fire tragedy in Kiambaa village in Eldoret East District of Uasin Gishu County.

3. To find out the relationship between resilience and internal and external factors of internally displaced persons after experience of trauma.

1.5 RESEARCH QUESTIONS

1. Which type of internal factors influence resilience among victims of a fire tragedy in Kiambaa village in Eldoret East Sub-County of Uasin Gishu County?
2. What are external factors that influence resilience among victims of a fire tragedy in Kiambaa village in Eldoret East Sub-County of Uasin Gishu County?
3. What is the relationship between resilience and internal and external factors of internally displaced persons after experience of trauma?

1.6 RATIONALE

Resilience is a crucial area for psychologists to assess individuals and strengthen them particularly those who have experienced various life threatening traumatic events. Resilience is relevant to traumatized people's adjustments to setbacks that arise from the tragedy. According to the available literature, little research has addressed factors that contribute to resilience after trauma and the psychological and individual experiences. Therefore, this study attempted to find out what motivates people to intrinsically rebuild their lives positively after experiencing traumatic events of the fire tragedy. It is hoped that the factors identified will be used by crisis workers and other experts working with traumatized individuals to encourage them and help them to develop resilient behaviour which will lead them to experience positive growth. This study is the first of its kind in Kenya and, therefore, it opens more areas for further research on the topic of resilience after trauma. It is the researcher's hope that the current study will inspire further studies of broad range of predictor variable that might boost resilient outcomes across the different types of post-traumatic episodes. Further, this study will provide a model that relates resilience with spirituality, social support,

age and gender among displaced persons after an experience of fire tragedy propelled by political violence.

1.7 THEORETICAL FRAMEWORK

Several theories have attempted to elucidate resiliency factors, their inter-relationships, as well as their underlying mechanisms, processes, and outcomes. These theories have emerged from personality, cognitive and biological orientations. The theoretical concepts of Richardson's "meta theory of resilience and resiliency" and Joseph and Linley "organism valuing theory" guided the study in its investigation on the psychosocial factors that contribute to resiliency after trauma.

1.7.1 Richardson's Meta-theory of Resilience and Resiliency

Richardson (2002) conceptualized that resilience is a force within everyone that drives them to seek self-actualization, altruism, wisdom and be in harmony with a spiritual source of strength. He identified three different waves of resiliency enquiry; characteristics of people who effectively cope with and grow through disruption, the process in which such people acquire these characteristics and the recognition of innate resilience and the capacity to grow and develop. According to the theory, resilient reintegration develops by the strengthening of the resilient qualities.

According to this theory an individual begins at a state of physical, mental and spiritual homeostasis (biopsychospiritual homeostasis - figure 1.1), then disruption occurs, in the current study the fire tragedy. After the disruption the individuals reintegrated to homeostasis in one of the four ways: resilient reintegration, re-integration back to homeostasis, re-integration with loss and dysfunctional re-integration. The current study specifically researched on the resilient reintegration and the protective factors (age, gender, personality traits, spirituality and social support) that contributed to it. The essence of re-integrating to

homeostasis in some cases may not be an option in situations such as permanent physical loss, mobility loss or death of a loved one. Recovering with loss means that people give up some motivation, hope or drive because they are prompted to by the demands of life. Dysfunctional reintegration occurs when people resort to use of destructive substances (Figure 1.1). Resilience reintegration may also be postponed and people may resort to negative coping mechanism such anger, distrust and bitterness. Years later such individual's coping pattern may be disrupted and they may reintegrate to healthier coping skills, this may occur through social support and intensive spiritual support. Richardson further asserts that there are protective factors that assist the individual to reach the stage of resilient reintegration and which comprise an adaptive state of mind, body and spirit, which according to Richardson (2002) is the attainment of biopsychospiritual homeostasis and this state can be achieved regardless of the circumstances of the individual.

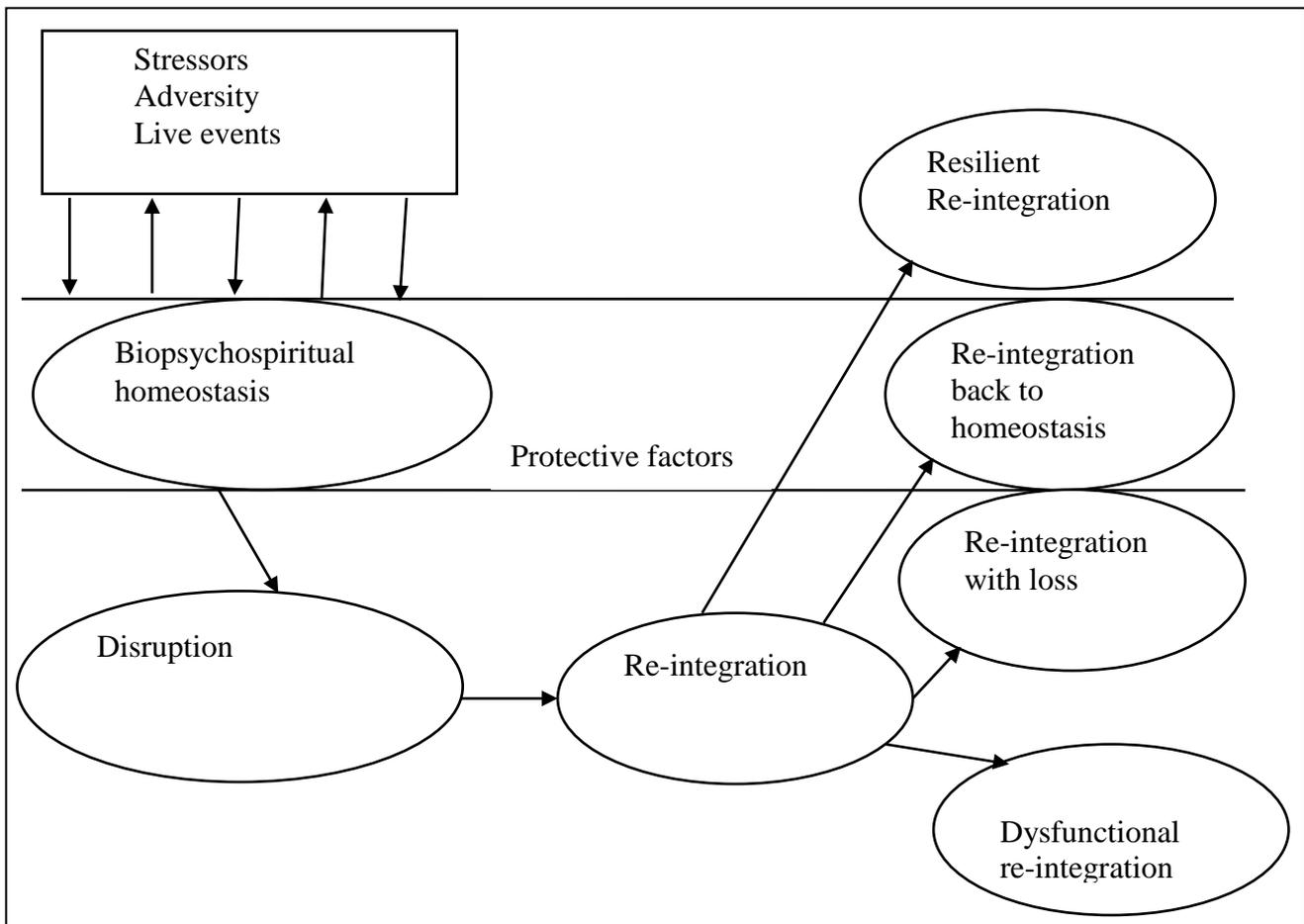


Figure 1.1: The Metatheory of Resilience and Resiliency
Source: Richardson (2002)

The study, therefore, attempted to find out to what extent the “metatheory” of resilience and resiliency is applicable in indicating the factors that contribute to resilience of the individuals in the sample. This according to Richardson (2002) happens when individuals re-integrate, and this involves experiencing insight or growth through disruption by identifying or strengthening resilient qualities. The theory identifies four levels of re-integration; reintegration to homeostasis, reintegration with loss and dysfunctional reintegration. These levels guided the study in classifying the sample population and clearly identifying individuals who displayed resilient behavior after the trauma. The theory was instrumental in the study particularly during the focus group discussions and interviews the researcher was able to observe and identify the levels of integration in the individuals. This was important in giving an in-depth understanding of the participants and they levels of resilience

1.7.2 Joseph and Linley Organismic Valuing Theory

This study is informed by Joseph and Linley (2005) in “organismic valuing” theory, which stems from Carl Rogers Person Centered approach, posit that people are intrinsically motivated to rebuild their lives in a direction consistent with the new trauma-related information. According to the theory, new trauma-related information can be processed either by being assimilated within the existing models of the world or existing models of the world must accommodate the new trauma-related information. The accommodation may require individuals to change their world views. Accommodation can either be negative which may include hopelessness and helplessness, or positive direction dependent on the meaning attributed to the traumatic event (Payne, Joseph, & Tudway, 2007). The theory gives three possible outcomes; the experiences that can be assimilated to the pre-trauma baseline, the experiences that can be accommodated in a negative direction (psychopathology) and experiences that can be accommodated in a positive direction (growth). The theory shows how people’s valuing process can lead to actualization of positive changes and psychological well-being through the positive accommodation of the new trauma related information which is provided by the social environment (Figure 1.2). This leads to greater psychological well-being, although it does not necessarily lead to greater subjective well-being. The theory holds that this occurs when the social environment is able to meet the individual’s psychological needs for autonomy, competence, and relatedness, and the organisms valuing process is then promoted.

Organismic valuing theory holds that it is human nature to strive to integrate new experiences and to reorganize the self-structure accordingly, to modify existing models of the world to positively accommodate the new trauma-related information. Adverse events show that people are fragile, that the future is uncertain, and when this happens to the self-structure it may lead to intrusive and avoidant states which are characteristic of post-traumatic stress

disorder (PTSD). The person goes through a series of oscillating phases of intrusion and avoidance as the new trauma-related information is processed, this continues until a baseline is reached.

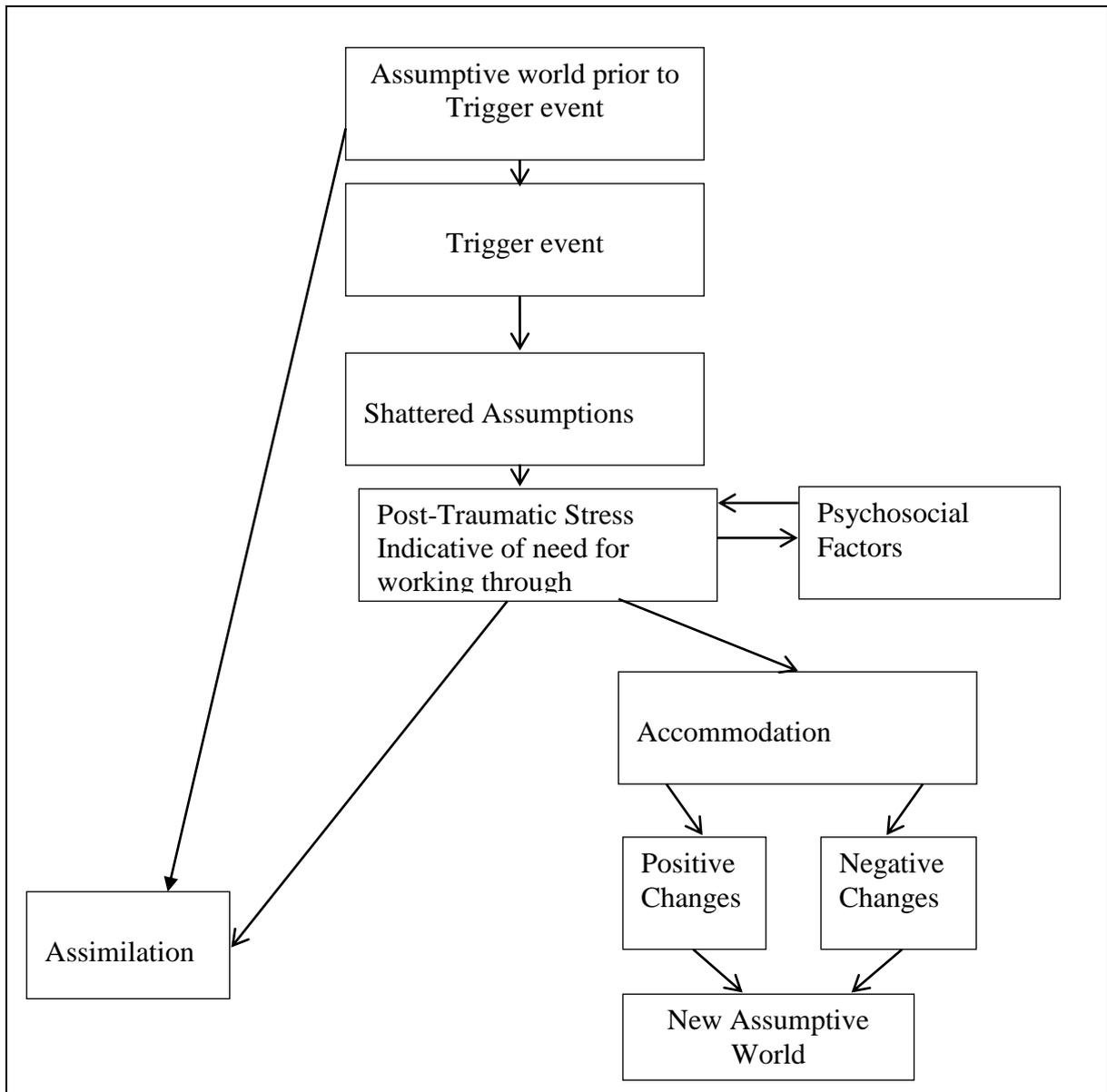


Figure 1.2: Organismic Valuing Theory of Resilience following Adversity
Source: Joseph and Linley (2005)

The theory is also consistent with the notion that accommodation rather than assimilation is necessary for growth. It specifies that accommodation may occur either positively or negatively. When a baseline is reached and intrusive and avoidant states are no longer

present, the cognitive assimilation of the traumatic memory or a revision of existing schemas to accommodate new information has been achieved by the person. However, this may be challenging and may require a supportive social environmental context that facilitates satisfaction of the basic psychological needs for autonomy, competence and relatedness. These needs act as factors of resiliency that direct the person towards positive accommodation of the traumatic material.

The theory also specifies the importance of comprehensibility which is significant in deriving meaning as people struggle with the traumatic event and when this is achieved assimilation or accommodation of the information may occur. In this theory the positive benefit is found in psychological growth which is facilitated by factors such as satisfaction of basic psychological needs which include affiliation, autonomy, competency and a supportive social environment.

Based on this theory, the study attempted to find out psychosocial factors that contributed to resiliency in the affected people of Kiambaa village that may have resulted to some individuals experiencing assimilation and others accommodation after the disruption or trauma from the fire tragedy. According to Joseph and Linley (2005) assimilation is simply returning to assumptive world before trauma and this was also conceptualized by Richardson (2002) as re-integration to homeostasis. Accommodation happens when individuals strive to integrate new experience which according to the theory it may result to positive or negative changes that will lead to the individuals acquiring new assumptions of the world (Calhoun, Cann, & Tedeschi, 2010).

The study also attempted to find out the resilient factors which may have motivated the positive changes the individuals experienced that may have resulted to them making new

assumptions to cope with the challenges faced after the fire tragedy at the church in which their families were taking refuge at the peak of post-election violence in Kenya. These changes according to Richardson (2002) occur positively when individuals re-integrate with loss and develop some motivation or drive because of life demands. Negative changes or dysfunctional re-integration occurs when the individuals develop psychosocial problems and are unable to cope with life situations. The concepts of these two theories guided the study in its attempt to find out the factors that contributed to resiliency among the individuals that were afflicted by the Kiambaa fire tragedy.

1.8 DEFINITION OF OPERATIONAL TERMS

Resilience: Fundamentally, resilience refers to positive adaptation or the ability to maintain or regain mental health, despite experiencing adversity (Stapleton, Taylor, Asmundson, 2006) Definitions have evolved as scientific knowledge has increased. Resilience is studied by researchers from diverse disciplines, including psychology, psychiatry, sociology, and more recently, biological disciplines, including genetics, epigenetics, endocrinology, and neuroscience. However, no consensus on an operational definition exists. The central question is how some girls, boys, women, and men withstand adversity without developing negative physical or mental health outcomes (Herrman, Donna., Natalia, Elena, Beth. & Tracy, 2011).

Trauma: In this study the definition of trauma was adapted from The *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition, Text Revision (*DSM-IV-TR*; American Psychiatric Association [APA], 2000) was be adopted. It defines trauma as “**direct** personal experience of an event that involves actual or threatened death or serious injury, or other threat to one’s physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent

death, serious harm, or threat of death or injury experienced by a family member or other close associate (Criterion A1). The person's response to the event must involve intense fear, helplessness, or horror (or in children, the response must involve disorganized or agitated behaviour)" (Criterion A2). (p. 463).

Internally displaced persons: In the current study the definition of internally displaced persons (IDPs) was adapted from the United Nation's (UN) Guiding Principles on Internal Displacement. The Guiding Principles define IDPs as "persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human made disasters, and who have not crossed an internationally recognized State border (Guiding Principles on Internal Displacement, E/CN.4/1998/53/Add. 1, February, 2009. New York: United Nations."

Spirituality: In this study its definition includes both a search for the transcendent and the discovery of the transcendent and so involves traveling along the path that leads from no consideration to questioning to either staunch non-belief or belief, and if belief, then ultimately to devotion and finally, surrender (Koenig, H. G., King, D. E., & Carson, V. B., 2012).

Social support:In the current study it is defined as the experience of receiving actions and behavior that are considered supportive by the recipient in fostering emotional, instrumental, informational, appraisal, and companionship needs, which matches the types of support sought by the recipient with ones that are provided by close relations and significant others (*for example, spouse, friends, family, relatives, group*) in an effort to improve well-being and effectively deal with life crisis (*for example, stress, depression, and other physical and psychological problems*). In addition provision of support refers to actual offering or con-

veying of supportive actions and behaviour – emotional, informational, and/or instrumental – that matches the kind of support sought by a person facing life strain/stress (Nurullah A. S. & Nurullah A. S. 2012).

Personality: In this study it is referred to as those characteristics that describe and account for consistent patterns of feeling, cognition and behaviour. This may include temperament and characteristics, disposition, goals, personal projects, abilities, attitudes, physical and bodily states, moods and life stories (Oliver, John, Robins, Lawrence & Pervin 2008).

Gender: In the current study it is used as an analytic tool to understand the different attributes for each sex in relation to the aspects of the fire tragedy (Dorothy, 2013). It will also be represented as a period of human life, measured by years from birth, usually marked by a certain stage which involves responsibility and capacity.

Age: In the current study age was used as an analytical tool to understand the resilience levels of the different cohorts in the sample of the study ((Dorothy, 2013). In this study, it also represented the state of being male or female and also with particular reference to the social and cultural differences rather than biological ones.

Kenya: A country in the African Continent. It is situated in the Eastern part of Africa with its coastline on the Indian Ocean.

1.9 CHAPTER SUMMARY

This chapter has discussed the motivation of the study in which it has been posited that when people experience tragic events such as violence they get traumatized. Despite this there are individuals who are able to adopt and bounce back with minimal disruptions to their lives. The ability to bounce back or cope successfully despite substantial adversity is referred to as

resilience. The rationale, the problem statement, the objectives as well as the research questions have been presented in this chapter. The chapter has also discussed the theoretical framework to guide the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 CHAPTER OVERVIEW

The review of the literature is divided into three sections. The first section introduces briefly the historical definition of resilience and trauma and its conceptualization. The second section of this chapter reviews empirical research studies on the internal and external factors that contribute to resilience after trauma such as spirituality, personality and social support. Finally the theoretical concepts of resilience and trauma are reviewed.

2.2 DEFINITION AND CONCEPTUALIZATION OF RESILIENCE

In psychology, the focus of resilience paradigm is on the individual. Fletcher and Sarkar (2013) emphasized that “it is the study of psychological resilience that seeks to understand why some individuals are able to withstand – or even thrive on – the pressure they experience in their lives” (p. 12). Numerous definitions and conceptualizations regarding resilience appear in the literature despite most of the definitions being based on concepts of ‘adversity’ and ‘positive adaptation’ (Fletcher & Sarkar, 2013). Positive coping, persistence, adaptation, and long-term success despite adverse circumstances are often considered to be synonymous with resilience (Winfield, 1994). Some other definitions also appear in the literature. For example, Lösel (2005) defined resilience in terms of processes of protection, repair, and regeneration in analogy to biological processes. Amering and Schmolke (2009) asserted that resilience was used to imply the power to resist, mental elasticity and regaining the former mental stability following a stressful period or event in clinical psychology and psychotherapy. Kelley and Pransky (2013) equated psychological resilience with inner health and asserted that “innate resilience...is the essence of a balanced, healthy state of mind evidenced by the logic of fundamental principles that appear to account for all human

experience” (p. 2). Nevertheless, there is seemingly no consensus between researchers on the definition of resilience.

Research literature indicates that there are different conceptualizations of resilience and researchers focus on resilience from different viewpoints. Literature on resilience include debates on whether resilience is a process or outcome, whether it is a process or trait, whether it is in born or acquired competency and how it can be distinguished from vulnerability.

Listing the definitions by several authors from 1991 to 2005, Manyena (2006) suggested that there has been a gradual refinement in the conceptualization of definitions from more outcome-oriented to more process-oriented definitions. Other researchers argued that resilience is a process oriented and cannot be understood in terms of static factors (Rutter, 1987). Cutuli and Masten, (2009) suggested that resilience cannot be viewed as a single trait because it involves many systems derived from individuals, families and societies. This argument emphasized that any effort to operationalize resilience as a universal trait is misguided.

Some researchers have used the terms resilience and resiliency synonymously (Miller, 2003). Masten (1994) suggested that the term resilience is process-oriented and on the other hand the term resiliency is more focused on an individual’s internal traits. Early conceptualizations of the resilience construct was based on the ego resilience concept (Block & Block, 1980; Block & Kremen, 1996) which reflected the strength and maturity of the ego in the face of adversity.

Blocks (1980) theorized ego-resiliency as a central personality construct offering adaptive flexibility; the definition given by this author “the dynamic capacity of an individual to

modify his or her modal level of ego control, in either direction, as a function of the demand characteristics of environment” (p. 48). Individuals with highly ego-resilience could adapt and be in control of themselves in times of adversity based on the environmental conditions compared to individuals with low levels of ego-resiliency who were more likely to behave in a maladaptive manner. As a result, these individuals were conceptualized to be more likely to experience self-confidence, positive affect, and overall psychological adjustment (Block & Kremen, 1996).

Another argument in the resilience literature concerns the difference between resilience and vulnerability and whether the two concepts can be defined in relation with each other. “The concept of vulnerability emerged in the 1970s and was promoted by the environmentalist movement” (Furedi, 2007, p. 487). Furedi asserted that vulnerability is a state of being that precedes a disaster; a society makes meaning of an adversity through this cultural metaphor and a wide variety of group identities are marked using vulnerability (for example, women, the elderly). Miller and colleagues (2010), from a social-ecological perspective, aimed to determine whether resilience and vulnerability were conflicting or complementary concepts. They concluded that although both approaches are concerned with how systems respond to change, systems are considered quite differently in each approach. Resilience and vulnerability researchers often adopt different starting points, guiding questions and frameworks; nevertheless, they may address similar themes and problems. The interaction between vulnerability and resilience currently attract the attention of researchers from various disciplines. For example, in the three-hit concept of vulnerability and resilience within the epigenetic field of studies (Daskalakis, Bagot, Parker, Vinkers, de Kloet, 2013), it has been asserted that vulnerability is enhanced in a given context when failure to cope with adversity accumulates. On the other hand, when relatively mild adversity is experienced in early life,

individual is prepared for the future and resilience is promoted in later life. However, when a mismatch occurs between experiences in early and later life, coping fails and vulnerability is proposed to enhance.

Resilience has also been conceptualized in the literature as a trajectory following trauma. Watson and Neria (2013) discussed that resilience is a functional trajectory but not a fixed attribute; it depends on the quality of stressor, the surrounding culture and circumstances, and individual variations in response to risk. An individual who has exhibited resilience in response to an event may not be resilient at other times in the face of adversity. Rutter (1987) also described resilience as an interactive process in which resilience has to be inferred from individual variations in outcome following significant stress or adversity. Therefore, achieving a better understanding of those variations would be important to infer resilience in individuals.

Resilience, as a trajectory, has also been discussed in relation to different functional outcomes following adversity. O'Leary and Ickovics (1995) identified four potential consequences following trauma: succumbing (characterized by a continued downward slide which ultimately ceases), survival with impairment (characterized by a post-event diminution in functioning and a failure to return to baseline functioning), recovery (resilience), and thriving (post event adaptation that exceeds pre-event levels). In their classification, resilience was not the same thing as thriving but a synonym for recovery from trauma.

Similarly, other authors have suggested that resilience may be seen in a recovery trajectory involving a return to baseline functioning after experiencing a challenge and that resilient people are less vulnerable and “bend rather than break in the face of adversity”

(Butler, Morland, & Leskin, 2007, p. 402). According to Bonanno (2004; 2005), resilience is one of the four prototypical trajectories observed following traumatic events along with recovery, chronic dysfunction, and delayed dysfunction. These prototypical trajectories represent the individual variation in response to potentially traumatic events. Recovery is characterized by initial elevations in psychological symptoms in moderate to severe levels that decline over the course of many months. In resilience trajectory, initial, brief spikes in psychological distress may be observed. Resilient individuals nonetheless maintain functioning effectively at or near normal levels. Recently, Bonanno and Diminich (2013) proposed two other trajectories of positive adjustment: emergent resilience and minimal-impact resilience. Emergent resilience refers to positive adjustment in response to chronically stressful circumstances. It is typical to observe this trajectory after the stressful circumstances have abated. On the other hand, the minimal-impact resilience represents the trajectory following a single-incident trauma and “suggests little or no lasting impact on functioning and a relatively stable trajectory of continuous healthy adjustment from before to after the PTE” (p. 380). Resilience trajectories are examined in the literature using longitudinal research methods which are beyond the scope of the present study.

The concept of resilience was first introduced in the 1970s and it was conceptualized as a stable personal characteristic of children at risks who appeared to be doing well and were thought to be vulnerable (Pines, 1975). This perspective indicated that such children had special positive internal characteristics such as strong positive relationship with the caregiver. Research in the area of resilience has developed over time and researchers now recognize it as a dynamic process that results from ongoing transactions between the child and the environment (Luthar & Zelazo, 2003). Researchers have also posited that resilience is a clinical paradigm that is disruptive and of the capacity to accommodate to trauma and grief.

The psychological nature of resilience (innate and acquired) is more evident when absent than present. When it is operative, the traumatized individual shows little or observable change to an adverse event. But when the resilience is not effective the individual becomes highly distressed and dysfunctional. Resilience allows a sense of calmness, self-control, detachment and hope. It performs the crucial function of psychological stabilization which enables the traumatized individual to effectively process and respond to the challenge.

The study of resilience began with developmental studies of children who had healthy lives despite coming from unhealthy family backgrounds (Gorman-Smith, Henry, & Tolan, 2004). This was followed by substantial amount of research in the areas of health which focused more on the effects of resilience for coping in traumatic situations (Luthar & Sexton, 2007). Studies have shown that some people are able to continue with their daily live and carry out daily living activities such as going to work, taking care of family, experience positive emotions and enjoy life after adversity (Bacchus, 2008; Keyes, 2007). However, others when faced with traumatic situations struggle to a great extent and end up in debilitating distress and intrusive thoughts.

Various studies have connected the concept of resilience with the way individual and groups deal with stressful events (Mansfield, Beltman, Price & McConney, 2012; Pipe, Buchda, Launder, Hudak, Hulvey, Karns, 2012; Mansfield, C.F., Beltman, S., Price, A., & McConney, A. (2012). Gupta, Sood & Bakhshi, 2012; Avey, Luthans & Jensen, 2009; Van Breda, 2011). Recent studies on resilience have focused on different professions (such as, health, social workers, psychologists and counselors) (McCann, Beddoe, McComick, Huggard, Kedge, Adamson, & Huggard, 2013). Generally, most studies are more inclined to the concept that resilience is determined by a person's capability to deal with adversity (Van Breda, 2011; Gupta, Sood, & Bakhshi(2012).; Mansfield, Beltman, Price, & McConney (2012). In

most of the studies, resilience has been conceptualized in relation to a person's determination and capacity to deal with adversity (Van Breda, 2011; Gupta *et al.*, 2012; Mansfield *et al.*, 2012). Researchers have identified several indicators that may predict a person's resilience. These indicators include, optimism (Tusaie & Patterson, 2006), high self-esteem (McGregor, Nash & Inzlicht, 2009) and strong sense of coherence (Surtees, Wainwright & Khaw, 2006).

To conclude, there are many efforts to conceptualize and theorize psychological resilience with large number of researchers proposing various definitions. In addition, there are debates going on in the literature regarding how to conceptualize resilience; is resilience a stable trait, a process, or an outcome? The field has no definite answer. Furthermore, these debates are also complicated with other conceptualizations including trajectories. Nevertheless, empirical studies show that it is commonly observed following adversity. Hence, the field still needs an increased number of empirically validated theories/models tested on community members and traumatized populations, and also in disaster contexts. This definitely requires an appropriate assessment of psychological resilience. The next section addresses what may be assessed as resilience and how resilience may be assessed.

2.2.1 Models of resilience

Resilience means confronting change during the hard times, taking up the fight, experiencing both suffering and courage and effectively working through the difficulties both internally and interpersonally (Walsh, 2006). It also involves confronting change by acknowledging it, dealing effectively and appreciating them as experiences for learning and growth (Brooks & Goldstein, 2004). Resilient individuals possess strong sense of control or influence over difficult experiences and sufficiently commit to the activities they are involved in. Resilient growth is a combination of positive personal assets that reside within the individual as well as resources such as social networking support (Ungar, 2008).

Three models of resiliency that have been identified by researchers include compensatory, protective and challenge (Fergus & Zimmerman, 2005):

The compensatory factor model involves the factors that counteract or operate in the opposite direction of the risk factor. It explains a situation where resilience factor has a direct effect on the outcome and also independent of the effect of the risk factor. For instance, alcohol abstinence or alcohol moderation is compensatory in the sense that it is directly and independently associated with lower risk for youth suicide (Andersons & Ledogar, 2008).

The protective model indicates the importance of assets and resources in moderating or reducing the effect of a risk on a negative outcome (Flemming & Ledogar, 2008). The protective factors may operate in several ways to influence the outcomes; it may neutralize the effects of risks; weaken them or enhance the positive effect of another factor in producing an outcome. For example, being drug free, though not directly associated with lower suicide risk, is associated with lowered alcohol use and thus is a protective factor that may enhance the individual's potential of committing suicide (Flemming & Ledogar, 2008).

The challenge model involves the relationship between the risk factor and the outcome. Exposure to both low and high levels of a risk factor are associated with negative outcomes, but moderate levels of risk are relate to positive outcomes. For instance adolescents exposed to moderate levels of risk may be confronted with enough of the risk factor and they may learn how to overcome them. Researchers have used the challenge model in longitudinal studies to track how repeated exposure to challenges may prepare the individuals on how to deal with adversitis in the future (Flemming & Ledogar, 2008).

An early process-based and sociological model defined resilience as a dynamic interaction between protective factor and risk factor particularly in individual and familial levels. The model indicated that the important factors that promote resilience not only depended on the

extent of support provided to the child but also the external support received from the environment (Garmezy, 1991 as cited in, Malhi, 2012). In this model resilience is viewed as a process which involves empowering individuals to shape their environment and also in turn be shaped by their environment. Another framework developed by Werner (1995) elaborated on three contexts of protective factors that play an important role in the promotion of resilience. These factors include individual characteristics such as good communication and problem solving skills, ability to relate well with caregiver, the family bond and ties, and also a community that reinforces and rewards competences.

A recent framework titled resilience and activation provided a basis for how to access social resources that promote wellbeing and resilience after trauma at individual and community levels (Abramson, Grattan, Mayer, Colten et al, 2014). The authors suggested that access to or engagement with social resources activates inherent individual resilience attributes. Social support, including family cohesion/warmth, strong social support networks, and bonding with others were indicated as potential activators to resilience.

Kumpfer (1999) developed a transactional resilience framework which has been tested in several empirical studies. The framework describes resilience as interaction between the resilient individual and his/her environment which includes both the process and outcome constructions. The framework identified six major cluster variables which include four domain of influence and two transactional points between domains which researchers have suggested are predictive in an individual's resilience. The four domains identified were acute stressor or challenges, the environmental context, internal characteristics of the individual and positive outcomes. The transactional points included the person-environment transactional process and person-outcome transactional processes.

In the present study, psychological resilience is conceptualized both as an individual attribute and an outcome following fire tragedy; and it is defined as the ability to bounce back from and withstand adversities and threatening situations by maintaining healthy levels of psychological functioning. Specifically, low levels of posttraumatic distress and resilience as measured by the ability to cope with stress are used as indicators of resilience.

Leipold and Greve (2009) outlined an integrative model of coping, resilience and development in which they viewed resilience as a conceptual bridge between coping and development. Defining resilience as the individual stability under significant adverse conditions, authors proposed that coping processes such as assimilation and accommodation influenced by personal and situational conditions result, to a large degree, in resilience in adulthood.

In a recent model proposed with an effort to develop a measuring tool for resilience, Hoijtink, Brake, and Dückers (2011) suggested that the positive effect of psychological resilience on the degree of being affected by a disaster, adoption of a behavior, and search for information is mediated through social context (indicated by social optimism, social support, and attachment to place) and trust in government and information.

Rutten et al. (2013) also provided a model of resilience and trajectories of risk and resilience. In the model, the level of an individual's well-being is illustrated as declining in response to severe adversity. In this model of resilience, mental health disturbance following trauma is followed by mental health recovery as time passes. It was suggested that there is variance between individuals in the level of mental well-being before the exposure, the speed and

severity of mental health disturbance in response to the exposure, the speed and timing of mental health recovery and level of mental health and well-being after the exposure-related disturbance and recovery.

To summarize, there is no unitary theory or model of psychological resilience following adversity agreed upon by researchers. Some theories view resilience as a process while other theories view it as an outcome of the life prompts. In some theories such as the resiliency theory by Richardson (2002), resilience is equated with growth or “bouncing-back” in some models such as Rutten et al. (2013) model of resilience. Although theories seem to share elements including bouncing back to pre-trauma psychological functioning or optimal coping, there are still a high number of theories and models constructed to define and conceptualize psychological resilience, possibly due to the complex nature of the concept. The models and theories of resilience addressed in this section provide foundation for understanding resilience. Based on those models and theories, various factors have been tested in empirical studies. The following section presents an overview of empirical research findings about resilience in the literature.

The present study is especially guided by two highly-cited theories in the literature. Richardson’s meta theory of resilience and resiliency (Richardson, 2002) and the Organismic valuing theory (Joseph & Linley, 2005). These theories are similar to trajectory models of resilience. In Richardson’s theory, individuals are considered to encounter different reintegration outcomes following adversity. The four types of reintegration are resilient reintegration, return to biopsychospiritual homeostasis, reintegration with loss, or dysfunctional reintegration. “Resilient reintegration means to experience some insight or growth through disruptions” (Richardson, 2002, p. 312). In reintegration back to homeostatis,

individual is healed and “just gets past” a disruption while in reintegration with loss, some motivation, hope or drive is lost because of disruption. When people resort to dysfunctional ways of coping such as substance abuse or destructive behaviours to deal with life prompts, dysfunctional reintegration occurs. One model based on this Resiliency Framework is Machida et al.’s (2013) model of resilience after traumatic injury which was developed after interviewing twelve male quadriplegic wheelchair rugby players. In this model, development of resilience was sought to be a multi factorial and interactive process. This process involved pre-existing factors and pre-adversity experiences, disturbance/disturbing emotions, multiple sources and types of support, special opportunities and experiences, various behavioural and cognitive coping strategies, motivation to adapt, and gains from the resilience process. No factor is the sole determinant of resilience; the interaction between processes in the model characterized resilient integration. The organismic valuing theory posits that there are possible outcomes of the individuals cognitive emotional processing namely, assimilation, negative accommodation and positive accommodation. Traumatized individuals assimilate the traumatic experience so that just world beliefs are maintained and this requires complex cognitive strategies. Self-blame is one such strategy. If people are to blame for their own misfortune, then the world remains a just one in which they get what they deserve. In contrast, individuals who accommodate their experience, by appraising and accepting that the new trauma-related information is incongruent with pre existing beliefs must modify their perceptions of the world. These individuals no longer perceive the world as just, but as random or unjust, and they modify their existing models of the world to accommodate this new information. Accommodation requires people to change their worldviews, whether that change is in a positive or a negative direction. Accommodation may be made in a negative direction (e.g., a depressogenic reaction of hopelessness and helplessness), or in a positive direction (e.g., that life is to be lived to the full in the here and now). Thus, cognitive

accommodation can lead to negative changes in worldview and resultant psychopathology, or to positive changes in worldview and growth (Joseph, 2008). Having needs met provides key resilience outcomes which are vital in the accommodation of future traumas (John, Alex & John, 2012).

2.3 FACTORSAFFECTINGRESILIENCE

2.3.1 Age and Resilience

Discussions about the role of age in terms of political violence and resilience should perhaps attend to how exposure to political violence varies according to age, rather than age alone as a protective factor. For instance, in one study, researchers found older children experienced a larger proportion of war traumas in comparison to younger children (Macksoud & Aber, 1996). Furthermore, understanding the role that age might play within resilience related to political violence requires more than simply comparing rates of negative outcomes resulting from political violence across age groups. It requires looking at developmental differences that might account for shown differences. For example, Kuterovac Jagodić (2003), in research on political violence among Croatian children, compared coping strategies among children along six types of strategies, including aggressive acts, acts aimed at distraction, and problem-oriented strategies. These authors found younger children tended to use more strategies of distraction than older children, whereas older children tended to cope by employing aggressive strategies.

Research has also examined whether family level factors, such as demographics, mental health, or place of residence, might offer some protection from the stress of political violence. Findings are quite mixed regarding the influence of parents' level of education, with some authors finding no influence on children's adjustment to political violence (Macksoud &

Aber, 1996). Other studies show disparate findings: one found increased symptoms among children whose fathers had a lower educational status (Haj- Yahia, 2008) and another study found a positive relationship between children's PTSD and mother's level of education. Qouta, Punama_ki and El Sarraj, (2003). Quota, et al. (2003) theorize two possible explanations for this: more highly educated mothers might encounter more political violence as they may be more likely to work outside the home and , or more highly educated women might be inclined to discuss children's symptoms with their children, thus increasing children's reports of symptoms to interviewers. With regards to other family demographics, higher economic or occupational status may be protective (Kimhi, 2010; Macksoud & Aber, 1996) and mother's mental health may significant influence children's outcomes related to political violence (Cummings, et al., 2009; Quota, et al., 2003).Area of residence has also been considered as a variable that might change resilience trajectories for those exposed to political violence. In two studies, youth in rural areas and refugee camps had poorer mental health and behavioral outcomes than youth who lived in urban areas (Giacaman, Shannon, et al., 2007; Haj-Yahia (2008). Differences in regional demographics might account, at least in part, for poorer outcomes; two authors found differences in the magnitude of political violence, including extreme deprivation, and differences in political violence related emigration based on children's area of residence (Giacaman, Shannon, et al., 2007; Macksoud and Aber, 1996). In addition to demographic characteristics, children's values and beliefs; temperament and emotional orientations; and cognitive and social skills seem to facilitate their positive adjustment in the face of political violence. Strong religious conviction has long been recognized as an important component of resilience for youth; the importance of religious beliefs is also evident for youth in settings of political violence (Barber, 2001; Eggerman & Panter-Brick, 2010).Studies with children from places such as Afghanistan, Bosnia, Colombia, and Eritrea all conclude that hope, determination, and

agency facilitate an orientation towards the future and foster senses of optimism and control that enable children to endure hardships (Berk, 1998; Cortes & Buchanan, 2007; Eggerman & Panter-Brick, 2010; Farwell, 2001). Cognitive capacity and intelligence also appear to protect children from the effects of political violence, as do affect regulation (including the ability to remain calm in adversity) and a sense of humour (Berk, 1998; Cortes & Buchanan, 2007; Gibson, 2002; Qouta, Punama, Montgomery, & Sarraj, 2007). Illustrating the importance of both future-orientation and cognitive capacity, children's ability to constructively plan for their safety may be key to their physical and emotional well-being in contexts of political violence (Cortes & Buchanan, 2007; Farwell, 2001). For instance, female child soldiers in Colombia established partner relationships to avoid being indiscriminately used as sex slaves (Cortes & Buchanan, 2007). In sum, regarding children, the role of demographic factors, including gender, age, and family characteristics, appears to be unresolved within the literature on political violence and resilience. There exists a need for more research that considers not only the facts of these demographic characteristics, but the mechanisms through which they work. It is clearer that certain individual temperament, values, emotional orientations, and skills appear to be protective, such as humour, religious conviction, a sense of agency, future orientation and an ability to regulate affect.

Relative to the research on children and resilience within the context of political violence, fewer studies focus on political violence and resilience in adults. Findings are less in number but more consistent across studies; for instance, three separate studies each found older adults fared better than younger adults in the face of political violence (Hobfoll, Mancini, Hall, Canetti, & Bonanno, 2011; Khamis, 1998b; Kimhi, 2010). Stronger economic conditions also seems important for adults' adjustment to and recovery from political violence (Khamis, 1998b; Kimhi, et al., 2010). Women's educational level might also offer some degree of

psychological protection from the effects of political violence (Khamis, 1998b). In addition, several studies found that males demonstrated more resilience than females (Hobfoll, et al., 2011; Kimhi, 2010).

Consistent with, and perhaps one explanation for, the findings regarding how males seem to fare better in the face of political violence than females, one study found that women and men who were exposed to political violence experienced social support differently: men experienced high satisfaction with social support, whereas women experienced social support as inadequate and insufficient (Punama_ki, Komproe, Qouta, El-Masri, & de Jong, 2005). This suggests that, just as our findings with youth illustrated, beyond simple gender differences, we need to investigate the distinct ways in which males and females might experience factors related to risk and resilience within political violence. Eggerman and Panter-Brick (2010) found that religious conviction, including giving ones' fate over to a higher power, was a common coping process used among adults. Service, perseverance, and effort were also all core components of coping among adults in Afghanistan; in part, this may be due to the relationship ascribed by participants 14 between these values and economic well-being, which respondents identified as central to overcoming the effects of war (Eggerman & Panter-Brick, 2010). Though fewer in number than studies addressing personality traits among youth, studies of adults similarly conclude self-esteem; senses of hope and optimism; and processes of problem solving are protective and build empowerment within the face of political violence (Hernández, 2002; Lee, et al., 2008; Shalhoub-Kevorkian, 2006).

Research with adult survivors of torture and other war trauma found that coping styles employed by participants made a difference in how effectively they were able to use

cognitive processes to manage the stressors of war. For example, in examining how coping styles interacted with the cognitive process of appraising war trauma as controllable, participants who favoured a withdrawal coping style showed more PTSD symptoms than did the participants who did not tend to withdraw. Furthermore, a disengaged coping style interacted with cognitive processes so that, for example, people who viewed situations to be controllable but who relied on a disengaged coping style were more at risk for mental health symptoms (Hooberman, Rosenfeld, Rasmussen, & Keller, 2010). This suggests additional attention should be paid to the ways in which individuals use emotional and cognitive strategies to withstand the effects of political violence. Studies of adult resilience within political violence provide results consistent with those from studies of children, demonstrating the protective influence of personal traits and values like optimism and religious conviction. More literature exists about adults than about children regarding the importance of processes of meaning making, a central process within coping (Lazarus, 2000; Ursano, Fullerton, & McCaughey, 1994). For instance, Hernández (2002) reported that, among human rights activists targeted with political violence in Colombia, taking part in meaning-making processes within the context of trusting relationships (i.e. understanding the political nature of the atrocities and working for peace and justice) allowed survivors to develop a sense of internal coherence. Eggerman and Panter-Brick (2010) found that cultural values such as service, morals, and honor helped adults in Afghanistan to make sense of violence experiences and thus endure war. Although this literature appears to still be in its early stages, studies among adults seem to agree on the positive outcomes of attempts to cognitively resolve the considerable dissonance that political violence creates as the maliciousness and evil of the experiences, and its massive scale challenges people's previously held notions of justice and human decency (Janoff-Bulman, 1992; Koopman, 1997; Robben, 2005).

The review of literature in this section focused on the theoretical perspectives of the life span theory whose central concept is ontogenesis, the chronological unfolding of human development (Thelen & Smith, 1994), which includes size, change in complexity and differentiation of function such as change in motor reflexes at various stages of life (Smith-Osborne, 2007). Closely related to this view is the process of “epigenesis”, which indicates that human development unfolds from part to whole, with the elements of the chronologically appropriate ability or personality feature emerging gradually in a prescribed sequence until the functional whole is achieved (Erickson, 1950). The age related concept of life stage and the notion that each stage is characterized by predictable features, tensions, changes that lead to subsequent stage was of interest in the study.

Researchers have also suggested that it is important to understand resilience outcomes from the developmental perspective (Yates & Masten, 2004). People’s expectations and indicators of good outcomes change as they age, therefore, intervention strategies need to be designed to suit these developmental changes. These developmental approaches indicate the importance of defining resilience in relation to the changing nature of individuals particularly the positive age appropriate issues (such as positive peer relationships), resources and adaptive capabilities. This according to Yates and Masten (2004) will provide a better understanding of resilience.

Empirical studies on age and issues related to health have conceptualized that successful aging is connected to psychological and social components such as quality of life (QOL) and the ability of an individual to engage in meaningful activities after adversity (Depp, Glat, & Jeste, 2007). Elements such as psychological well-being, social connectedness and ability to adapt to age associated changes have been regarded as important indicators to successful aging (Young, Frick & Phelan, 2009). In this study, age was a vital factor that enabled

individuals to adapt successfully and develop the capacity to bounce back from adversity. In a study on resilience, age and perceived symptoms in persons with long term physical disabilities the researchers found that older age was associated with high levels of resilience, while middle and younger ages recorded relatively low resilience. The middle aged recorded the lowest resilience levels and the researchers contended that this may have resulted from the high impact of life demands typically associated with this age (Alexandra *et al.*, 2014).

In a study on resilience in ambulance service paramedics and its relationship with the well-being and general health in Queensland (Australia), it was found that age was a strong indicator of resilience in both population and ambulance service paramedics. Individuals of higher age were found to be more resilient than younger individuals (Gayton & Lovell, 2012). Another study on resilience among police officer found no significant effect to indicated age and resilience (Dickstein, Suvak, Litz & Adler, 2010).

2.3.2 Gender and Resilience

This ambiguity about gender and resilience might be due, in part, to how gender affects the array of outcomes used to consider the effects of political violence. There is some evidence that girls exhibit fewer problem behaviours than boys after exposure to the same amount of political violence (Garbarino and Kostelny, 1996). Other studies, however, found girls to be more vulnerable to negative outcomes, demonstrating more PTSD and stress and less Post-Traumatic Growth (positive change resulting from adversity) (Kimhi, Eshel, Zysberg, & Hantman, 2010; Qouta, Punama_ki, & El Sarraj 2003). Still other studies have shown that males and females exhibit similar levels of resilience (E. F. Dubow, et al., 2010; Laor et al., 2006).

The ways in which males and females experience political violence must be considered when looking at the question of resilience and gender, as this might be a reason for the discrepancy in outcomes across genders. For instance, although the authors of one study of children in Lebanon did not find gender to moderate the relationship between political violence and mental health, they did find that boys reported a higher number of war experiences in comparison to girls (Macksoud & Aber, 1996). The authors suggest a few reasons why this might have occurred, including that girls might be easier to control and protect, or were more apt to follow safety instructions and to be kept at home or inside during the fighting. Authors also noted that girls are more apt to be sent away to safer regions, whereas boys are kept at home to assist the family. Similarly, in study in Gaza, Barber (2008) found that boys experienced far higher rates of direct Political violence than girls, perhaps due to their increased involvement in political activity in comparison to girls; nearly two-thirds of boys reported that they had been hit or kicked by soldiers and one-quarter reported that they had been imprisoned. Giacaman (Giacaman, Shannon, et al., 2007) also found that girls reported less exposure to political violence overall than boys (although they reported more symptoms of depression than boys). Other researchers have not found differences in exposure to political violence based on gender (Haj-Yahia, 2008). As evident in the dynamics discussed above, research seems to highlight that boys and girls might experience political violence differently, perhaps related to gender-based norms and the accumulation of risks across both political violence and family violence found that girls seem to fare better than boys when faced with increasing levels of violence; these authors suggest the ways in which gender norms play out may have interacted with the events of the political violence so that girls were actually offered more opportunities for resilience. Specifically, Garbarino and Kostelny propose that conflict-related upheaval and chaos leads to less supervision and more freedom;

authors posit this increased independence may foster resilience among girls while posing a risk to boys.

Discussions about the role of gender within political violence might do well by not focusing on who is more resilient (boys or girls), but rather about how risk and resilience might manifest differently for boys and girls (Barber, 1999, 2001; Laor, et al., 2006; Punama_ki, Qouta, & El-Sarraj, 2001). Haj-Yahia (2008), for instance, found that in the face of political violence girls showed more internalizing symptoms, whereas boys showed more externalizing symptoms. As with gender, findings are mixed regarding the role the age of a child plays in resilience. Some findings indicate no connection between political violence and mental health outcomes due to children's ages (E. F. Dubow, et al., 2010 ; Qouta, et al., 2003). Other results suggest that older children may be somewhat more protected from the effects of political violence than younger children; perhaps due to the presence of a longer pre-conflict period of normalcy or due to advances in children's developmental trajectories, including increased abilities to process or make sense of political violence (Betancourt, 2011; Garbarino & Kostelny, 1996; Kuterovac-Jagodic, 2003; Qouta, et al., 2003). In contrast, two separate studies with Israeli adolescents found younger children actually had better mental health outcomes in the face of political violence (Kimhi, et al., 2010; Laor, et al., 2006). The finding that increasing age may impair resilience aligns with theories about the effects of chronic stress which posit that while body stress responses are initially adaptive, when stress responses remain consistently active, physiological reactions become maladaptive and cause wear and tear on the body (Geronimus, Hicken, Keene, & Bound, 2006; McEwen, 2000).

This study intended to find out from respondents' feedback, experiences and responses whether gender is a factor with regard to resilience. Through focus group discussions,

interviews and questionnaire, the researcher endeavoured to establish the relationship between gender and resilience. In a study on age and gender effects on coping in children and adolescent Hampel and Peterman (2005) concluded that girls used resilience factors more than boys. Gender differences in resilience factors are guided by the notion that men and women have different personality trait that influence the way they cope with adversity. For instance, men tend to communicate less during the time of adversity and they end up getting less help and empathy as compared to women who communicate more and earn empathy and other types of support (Sun & Stewart, 2007).

Women tend to utilize familial and community protective factors, while men depend more on individual protective factors. Studies have shown that women tend to be more appreciative of spiritual and social support than men who tend to rely more on personal competence (Friborg *et al.*, 2003).

Gender has been termed as an inconsistent and non-reliable predictor of resilience (Ballenger-Browning & Johnson, 2010). A study by Campbell-Sills, Cohan and Stein (2006), on the relationship of resilience on personality, coping and psychiatric symptoms in young adults, showed that there was no significant difference in resilience among the males and females. Females have scored high resilience levels than males with the gender differences stronger among older women than younger women. This was evident in a study on mental health and resilience at older ages, bouncing back after adversity in the British Household panel survey (Netuveli, Montgomery, Hildon & Blane, 2008).

2.3.3 Personality Traits and resilience

Personality has been described as an individual's characteristic style of behaving, thinking and feeling which arises from within the individual and remains fairly consistent through life (Schacter, Gilbert & Wegner, 2009). Studies have shown that personality traits such as

conscientiousness, agreeableness, openness to experience and extravertsness contribute to resilience. In a study of 155 graduates aged 20-25, Annalaksmi (2008) found that resilience and personality reinforce one another in a cyclic manner. Conscientious personalities are characterized as thorough organized and efficient planners. Individuals with agreeable personality are pleasant, accommodative, and cooperative and tend to promote social harmony. They have traits which include empathy, considerate, friendly, generous, helpful and with optimistic view of human nature. They view most people as honest and trustworthy and rarely suffer social rejection (Bierman, 2003). These individuals are also said to be motivated in helping other people without placing any conditions (Graziano, Habashi, Sheese & Tobin, 2007). A study on undergraduate's capacity to adapt successfully despite challenging and threatening circumstances in college show that individuals who are extraverts and conscientious are more resilient (Campbell-Sills, Cohan & Stein, 2006).

An analysis study on the relationship between personality and resilience confirmed that personality traits like exhibitionism, impulsivity and understanding contribute to resilience and being resilient enhances the personality traits (Annalaksmi, 2008). Other studies on different measures of psychological resilience, such as burnout coping and hardiness, further confirmed the findings that there is a significant relationship between burnout and personality factors that predicted emotional stability (Bakker, Van de Zee, Lewig & Dollard, 2006).

Another study on Chinese university students indicated that personality traits statistically predicted hardiness beyond age and gender (Zhang, 2010). A study that examined a sample of Korean university students found out that resilience was strongly related to self-directedness, high persistence, and low harm avoidance (Kim, Lee & Lee, 2013). The Korean students study found out interesting and striking differences that correlate with resilience. For instance, resilience was negatively correlated with reward dependence in highly sociable

family practitioners but was positively correlated in less sociable university students studying natural science or liberal degrees. These findings indicated that resilience is highly influenced by several personality components which may differ in various populations and also vary in the levels of diversity and cultural context (Kim, Lee & Lee, 2013).

2.3.3.1 Personality Traits and Resilience among Health Professionals

A study on the understanding of stresses and strains of being a doctor showed that resilience has a strong and significant relationship with a pattern of personality traits that support high functioning and demanding stressful professions that has a high risk of burnout (Riley, 2004; Eckleberry-Hunt, Lick, Hunt, Balasubramaniam, Mulhem, & Fisher. (2009). High resilience has also been associated with mature and confident personality types such as self-confident, self-directedness, cooperativeness, persistence and low levels of harm avoidance (Cloninger, 2004;Josefsson, Cloninger, Hintsanen, Jokela, Pulkki-Raback, & Keltikangas-Jarvinen, L. (2011).;Kijma, Tanaka, Suzuki, Higuchi, & Kutamura,(2000).; Cloninger & Zohar, 2011). These findings correspond with the concepts that resilience should not be considered in isolation but as an expression of intersections among multiple components of persons that can affect it positively or negatively (Eley, Cloninger, Walters, Laurence, Synnott, &Wilkinson, . (2013).

An investigation on coping strategies and experiences that bring joy and happiness to the personal and professional lives of the Singaporean nurses indicated that professional uplifts contributed to reliable and dependable working relationships among nurses; it also resulted in the health improvements of their patients (Lim, Hepworth& Bogossian, 2011). These personal uplifts included leisure activities, having disposable income, laughing with friends and spending time with family and friends, rest and relaxing activities, seeking emotional support from family and colleagues and spirituality (McCann, C. M., Beddoe, E.,

McCormick, K., Huggard, P., Kedge, S., Adamson, C., & Huggard, J. (2013). McCann, Beddoe, McCormick, Kedge, S., Adamson, C., & Huggard, J. (2013). A systematic literature review by Zander, Hutton and King (2010) which investigated coping and its relationship to resilience in pediatric oncology nurses found three themes namely: coping factors, coping process and how to overcome negative circumstances. These three themes are qualities that may increase adaptation and coping with workplace stressor and thus enabled the nurses to be more resilient.

Other studies identified specific resilient qualities in individuals in the nursing career. In a study of a large hospital of 772 theatre nurses, the researchers found a highly significant association between hope and resilience, self-efficacy and resilience and control and resilience; coping and competence indicated moderate significant relationship (Gillespie, Chaboyer, Wallis, & Grimbeek, 2007). These researchers further suggest that hopefulness may be significantly possible in supportive environment and self-efficacy may be influenced by the work culture. In a study of a small sample on factors that impact the resilience of registered aged care nurses, Cameron and Brownie (2010), cited in McCann, Beddoe, McCormick, Huggard, Kedge, Adamson, & Huggard, (2013) identified eight themes: (1) experience, (2) amount of satisfaction attained, (3) positive attitude or a sense of faith, (4) making a difference, close intimate relationships and sharing experiences with residents, (5) using strategies such as debriefing, validating and self-reflection, (6) support from colleagues, mentors and teams, (7) insight into their ability to recognize stressors and put strategies in place, and (8) maintaining work-life balance. In summary, it may be suggested that there are a number of individual and contextual factors that contribute to resilience in the nursing professionals such as work-life balance, hope, control, support, professional identity and clinical supervision (McCann, 2013).

Studies on professional social workers found a number of resilient qualities (McCann, Beddoe, McCormick, Kedge, S., Adamson, C., & Huggard, J. (2013) 2013). The resilient characteristics involved problem-focused coping, relaxation coping, optimism, conscientiousness, internal locus of control, humor, spirituality, gender, age, maturity and job-meaning, skill match and job variety (McCann *et al.*, 2013). Greifer (2005) identified personal and organizational protective characteristics of resilience specific to social work. Another study on social workers that explored their understanding of resilience in the face of workplace demands and stressor identified resilience maintaining themes such as self-care, strong professional values, exposure to positive role models and realistic professional expectations, maintaining learning and professional identity and holding to personal and professional goals (Beddoe, Davys, & Adamson, 2011). In this study, resilience was defined as a job engagement (the opposite of burnout).

Using qualitative analysis study on a small sample of social workers 13 (11 female), Graham and Shier (2010) and Shier and Graham (2011a; 2011b) found that personal factors positively influence the levels of subjective wellbeing (SWB) in the workplace. The researchers identified three themes that influenced their overall SWB namely (1) personal behaviours which involve spirituality, establishing routines, participating in activities, (2) interpersonal relationships from spouses, children, extended family and friends, and (3) clear sense of identity which goes beyond work relations to group, culture and personal identity. Other themes that influence SWB in the workplaces of the social workers include (1) the work environment (physical, cultural and systemic), (2) types and quality of relationships at work (with clients, colleagues and supervisors), (3) the nature of the job which includes workload, type of work, personal fit and meaningfulness of the work (Shier & Graham, 2011b). The respondents in the same study believed that mindfulness influence their overall SWB and also indicated five aspects of their life that were affected by mindfulness (Shier & Graham,

2011a). These areas were (1) reflection and development of personal identity, (2) consideration of issues related to control and openness, (3) being internally aware of oneself, (4) reflecting on important moments in one's life, and (5) maintenance of work life balance.

The above review of literature on professional social work and resilience suggests that there a number of individual and contextual factors that affect their resilience. These include age, gender, work life balance, personality and professional identity and quality of supervision support. Other reviews of social work and resilience literature have suggested that the ability of their resilience depends on their professional values and identity (Carson, King, & Papatraianou, 2011). Another researcher recommended that education and training in resilience, management of positive emotions and optimism might be beneficial to both students and qualified social workers (Collins, Onwuegbuzie, & Jiao, O. G. (2007).; Collins, 2008). The researcher further suggested that such training will enable the social workers to cope with work-related demands and also provide professional development, peer support, appropriate supervision and issues that deal with reaction.

2.3.3.2 Resilience and Hardiness

A review of literature on traumatized individuals following the September 11, 2001 New York terrorist attacks identified attachment style, hardiness, cognitive attribution style and biological factors as indicators of resilience. However, hardiness was the only personality indicator in the study that was positively associated with effective coping which led to the reduction of psychopathology and hence resulting to resilience (Neria, Digrande & Adams, 2011). Other studies indicated hardiness after disaster (Alexander & Klein, 2009; Lee *et al.*, 2011; Simmons & Yoder, 2013). Hardiness has been defined as an individual's ability to deal with adversity and also includes other personality characteristics such as; control, commitment and ability to tackle and overcome challenges (Simmons & Yoder, 2013). Hardy

individuals show more commitment to their work, have a high sense of life, greater feeling of self-control and are more open to change and also have the capacity to tackle and overcome the challenges they may be faced with (Bartone, 2006).

Research has not clearly defined the manner in which hardiness influences resilience in most studies reviewed it has been explained as the way individuals interpret events. Hardy individuals believe they are in control and when faced with adversity they look for opportunities to overcome the challenges and thus develop growth (Bartone, 2006). It is important to note in this discussion that some personality characteristics overlap, for instance studies have found that there is a strong correlation between hardiness, optimism, self-esteem, mastery and resilience and also suggested that some of these variables may be redundant (Lee, Jennifer, Sudom, Sodom, McCreary, & McCreary, 2011).

Self-esteem is another indicator of resilience that has been mentioned in several studies. In studies on the mental health of individuals of terrorism attack, the authors explain the relationship between self-esteem and resilience and indicate that people with high self-esteem are more likely to experience a positive frame of a traumatic incident and also adapt a stronger coping strategy (Dimaggio, Madrid, Loo & Galea, 2008; Lee, Sudom, & McCreary, & McCreary, Donald R. (2011). 2011; Prati & Pietrantonio, 2010). Other indicators of resilience that are closely related to self-esteem are personal control, and self-control. Personal control which refers to the belief that individuals have control over their own lives is seen as an indicator of resilience in this literature review (Simmons & Yoder, 2013). Self-control involves communication skills, strong will power, emotional stability and a positive self-concept (Naz, Saleem, Mahmood, (2010). 2010). Other authors indicate that the quality of self-control is a vital indicator of resilience in individuals (Everly, McCormack, & Strouse, (2012).). In an investigation on resilient characteristics in navy officer, the researchers found

other personality indicators of resilience namely calm, innovative thinking, decisive action, tenacity, honesty and interpersonal characteristics (Everly *et al.*, 2012). However, in other studies, there was no significant indicative effect of self-confidence on resilience. A study on the relationships among mental skills and resilience in warrior transition unit cadre members in the US military found other indicative effects of resilience which include foundation skills (commitment, self-confidence and goal setting (Pickering, Hammermeister, Ohlson, Holliday, & Ulmer, 2010).

2.3.3.3. Resilience and Coping

Good coping skills were also positively inclined to resilient individuals in other studies (Bates, Bowles, Hammermeister, Stokes, Pinder, & Moore *et al.*, 2010; Johnson, 2002; Naz, Saleem, & Mahmood, 2010; Simmons & Yoder, 2013; Waters, 2002). Two specific forms of coping described in these studies as indicators of resilience were: active coping (Johnson, 2002) and adaptive coping (Simmons & Yoder, 2013). Other researchers enhanced the indicator of coping skills to include the intensity of an individual's belief system. They assert that coping skills integrated with individuals beliefs will enable the individuals to cope with adversity better (Norris, Watson, & Kaniasty, 2002). These finding were supported by Naz, Saleem, and Mahmood (2010) in their study on the development of indigenous resilience scale for rescue workers. They indicated that self-confidence which is as an individual's belief in their ability to cope with adversity is an important factor that contributes to resilience. However, another study which investigated the relationship between coping and resilience found no significant effect (Dickstein *et al.*, 2010).

2.3.4 Spirituality

People engage in these spiritual pathways with the intent of enhancing their search to discover and realize their essential selves and attain their spiritual quest (Dalton, Eberhardt, Bracken, & Echols, 2006). Spiritual fitness can also be defined in terms of the capacity to

one's core self and what provides life a sense of purpose and direction; access to resources that facilitate the realization of the core self and strivings especially in times of trouble; and also the experience of a sense of connectedness with diverse people and the world (Pargament *et al.*, 2011).

Spirituality gives transcendent meaning to life; it is distinguished from all other things such as humanism, values, and morals and mental health. Spirituality is transcendent because it is outside the self and also within self, it involves a higher power. It is intimately connected to the supernatural, and involves beliefs, devotion, and surrender (Koenig, King & Carson, 2012).

Although the concept of spirituality is complex, scholar's definitions are inclined in beliefs, values, morals, and practices that individuals must possess them consistently. Spirituality has been defined broadly as one's relationship with and connection or closeness to a higher power (Yampolsky, Wittich, Webb & Overbury, 2008). Spirituality is also based on ethics and philosophy (Carlson & Erickson, 2002). Individuals motivated by a strong human spirit experience substantial benefits. They are in a better position to accept reality of the situation they find themselves in, develop coping strategies and find meaning in traumatic experiences. They are also able to access proper network strategies, persevere, grow and mitigate serious psychological problems (Tedeschi & Calhoun, 2004).

There is a wide range of cognitive and behavioural responses and outcomes among trauma survivors (Peres, Moreira-Almeida, Antonia, & Koenig, (2007). Several studies have shown that many people cope with traumatic or stressor events on the basis of their religious beliefs. A survey carried out in the United States of America found that spirituality was the second most common way of coping with the trauma after the bomb attack (Schuster, Stein, Jaycox, Collins, Marshall, & Berry, (2007). Many victims of stressful situations seek support from

religious professionals, friends and also read religious literature. Spirituality is considered as a basic knowledge that increases environmental adaptability of people, and has at least five efficiencies which lead to adaptive behaviours: Capability to sublimate deeds in order to orient with integration of the world; experiencing a high level of self-consciousness; investigating and purifying daily experiences about individual and spiritual and religious feeling; using spiritual sources to solve life problems; and virtuous deeds such as forgiveness and self-sacrifice (Julio, Moreira-Almeida, Nasello, & Koenig, 2008).

2.3.4.1 Spiritual coping and resilience

There is a wide range of cognitive and behavioural responses and outcomes among trauma survivors (Peres *et al.*, 2007). Spiritual coping involves several cognitive aspects, such as positive religious coping which includes benevolent reappraisal (seeking a lesson from God in the event) and seeking spiritual support (searching for comfort and reassurance through God's love and care). Others include active religious surrender (doing what one can and putting the rest in God's hands); seeking spiritual connection (thinking about how life is part of a larger spiritual force), and seeking religious direction (prayed to find a new reason to live) (Pargament *et al.*, 2004). A religious/spiritual belief system, by helping to interpret life events and giving them meaning and coherence, may contribute to the psychological integration of traumatic experiences (Koenig, 2006).

Spiritual beliefs are important in the context of trauma because they comprise of a substantial part of many people's global meaning systems and therefore play a role in coping with adversity (Park, 2005). Spirituality addresses issues of existential meaning and provides meaningful systems for making sense of tragic events by helping individuals to view them as part of the larger and more benign plan (Frazier *et al.*, 2004). Religion alters the meaning of a stressful situation by providing a way to make more benign attributions, aiding individuals to

see positive aspects of the stressful situations and facilitating perceptions of stress related growth (Park, 2005).

2.3.4.2 Spiritual meaning and resilience

Spirituality is based on a person's quest to understand decisive questions about life, meaning and relationship with the sacred or transcendent (Moreira-Almeida & Koenig, 2006). Trauma makes people look for a new sense of meaning in their lives and spirituality enables them to attain this. There is substantial evidence that high level of religious involvement leads to greater well-being and mental health (Moreira-Almeida & Koenig, 2006). Religious beliefs enable a traumatized person to be in control and experience a decrease in suffering.

Religion provides a world view that helps to give purpose and meaning of the suffering and also bring hope and motivation (Julio *et al.*, 2008). A study exploring the phenomenon of resilience among people who have experienced mental illness identified that the participants had hope, faith, optimism and spiritual courage. Spirituality enabled these individuals to experience a sense of relief, calm and peace (Edward, 2007). In a similar phenomenological study of six adults who had experience mental illness it was evident that spirituality helped them avoid suicide and provided a better meaning of life (Welding, May, & Muir-Cochrane, (2005)., 2005). There is a link between spirituality and human flourishing. In a major review, Myers (2008) found that religious people experienced greater happiness, life satisfaction, less depression and faster recovery after experiencing loss or crises. These people live healthier lifestyles have greater life expectancy and recover faster from illnesses.

2.3.4.3 Spiritual empowerment and resilience

Spirituality empowers a sense of perseverance in order to meet transcendent goals and be more able to cope with life stressors by practicing certain virtues; such as forgiveness, gratitude, honesty, integrity and hope (Hill & Pargament, 2003). These virtues have been

associated with better physical and mental health. Forgiveness is an important component of spirituality and it fosters resilience because it allows the individual to move past the potential crippling negative emotion and despair (McCullough & Van OyenWitvilet, 2002).

A study on 330 former Ugandan child soldiers indicates that 27.6 percent showed posttraumatic resilience, this was evident because they did not experience post-traumatic stress disorder (PTSD), depression and other clinically significant behavioural and emotional problems, despite being exposed to severe traumatic experiences during the war (Klasen, Oetinger, Daniels, M., Post,Hoyer & Adam, (2010). The posttraumatic resilience in these children was mostly associated with lower exposure to domestic violence, lower guilt cognitions, less motivation to seek revenge, a better socioeconomic situation in the family and more perceived spiritual support (Walque, 2011).

A similar study carried out on combatants in Uganda shows similar outcomes. Resilience is evident because of psychosocial issues and spirituality. Most of the combatants showed moderate signs of emotional distress and few showed signs of debilitating distress (Blattman & Annan, 2010). The majority of the combatants recovered without psychosocial interventions despite experiencing extreme violence. In the study of young children in Kenya, there were indications that emotional regulation was noticed because there was less aggression and more pro-social behavior (Kithakye, Moris, Terranova, & Myers (2010). Emotional regulation involves components of temperament such as affect and attention which are important in helping children cope with situations after adversity or traumatic episodes. These findings highlight the importance of building and maintaining supportive relationships after trauma.

2.3.5 Social Support in relation to resiliency

2.3.5.1 Social support

Scholars have proposed that one of the keys to understanding how resilience operates, whether associated with the effects of political violence or violence in other forms (e.g., community violence, child abuse), is to examine it within a framework that prioritizes the dynamic interaction between individuals and their environments (Fraser, Kirby, & Smokowski, 2004; Ungar, 2011b). For both children and adults, resilience within contexts of political violence appears to be closely related to the resources available in the surrounding environment--families, communities, and greater social and political contexts (what researchers refer to as social ecology) (Betancourt & Khan, 2008).

2.3.5.2 Family resources

Positive family functioning seems to offer at least some degree of protection for children from the effects of political violence (Barber, 1999; Berk, 1998; Cummings, Goeke Morey, Schermerhorn, Merrilees, & Cairns, 2009; Garbarino & Kostelny, 1996; Nguyen-Gillham, Giacaman, Naser, & Boyce, 2008; Thabet, Ibraheem, Shivram, Winter & Vostanis, 2009), although one study of the effects of war on aggression and prosocial behavior among Croatian children did not find that positive parenting had a protective effect (Kerestes, 2006). Core components of the family that appear to build resilience for children affected by political violence include: family support (Farwell, 2001; Nguyen-Gillham et al., 2008; Thabet, et al., 2009); parental acceptance (Barber, 2001); family stability (Berk, 1998); and family cohesion, family functioning, and secure parent-child relationships (Cummings et al., 2009). Findings from one study indicates that family support at least is not a one-dimensional concept; some youth said when there was too much discussion about the political situation, this process within families became counterproductive (Nguyen-Gillham, Giacaman, Naser,

& Boyce, (2008) There is some evidence that the protective function of parenting may diminish as children age; Quota et al. (2007) theorized the lack of correlation between parenting and mental health symptoms among older Palestinian adolescents may be because of the fading importance of parenting as children grow up. The family also is an important protective resource for adults facing political violence. Khamis' 1998 study of Palestinian women tested the importance of family relationships within the trajectory of political trauma and mental health. The study showed the level of a family's social-psychological resources was inversely related to psychological distress among traumatized women. This study also demonstrated the level of family hardiness (indicators included coordinated commitment, confidence, challenges, and control) was negatively related to psychological distress and positively related to well-being for this group (Khamis, 1998c). In Eggerman et al.'s study among students and caregivers in Afghanistan, family unity, particularly across generations, supported multi-generational economic success, which was central to adult participants' well-being within the context of war (Eggerman & Panter-Brick, 2010).

2.3.5.3 Social resources outside the family

Scholars of resilience have moved the concept beyond simple lists of internal traits; instead, resilience is analyzed within perspectives that stress how it ultimately depends on both the practice of individuals' accessing resources within their environments, and of the responsiveness of environment itself (Masten & Obradovic, 2008; Ungar, 2011b). Factors that operate within the relationship between individuals and their communities to protect individual well-being in the face of political violence include involvement in school, work and political struggles (Barber, 2001; Betancourt, Brennan, Rubin-Smith, Fitzmaurice, & Gilman, 2010; Khamis, 1998a; Nguyen-Gillham, et al., 2008), and opportunities for

connectedness to and acceptance from the community (Berk, 1998; Betancourt, et al., 2010; Cortes & Buchanan, 2007).

2.3.5.4 School and work as social resources

In the face of an onslaught of stressors related to political violence, merely maintaining daily activities of living can be viewed as an act of resilience. Attending school or works each foster a sense of normalcy and purpose in the midst of chaos. As Nguyen-Gillman et al. (2008) point out; schools and organizations provide much-needed structure and routine within the turmoil of political violence. Sustaining school attendance appears to protect children from the negative consequences of political violence. Barber (2001) found integration into schools offered some protection from depression and antisocial behavior for youth in Palestine. Betancourt et al.'s longitudinal study with former child soldiers in Sierra Leone found youth who were in school had higher levels of adaptive and pro-social behavior, despite the stressors of war (Betancourt, et al., 2010). In Nguyen-Gillham et al.'s study with adolescents in the West Bank (Nguyen-Gillham, et al., 2008), participants regarded education as a tool to counter the ongoing political violence. Among Afghan youth, education represented a pivotal force that would help youth to excel and to cope with political violence and the accompanying poverty (Eggerman & Panter-Brick, 2010). In Farwell's study among Eritrean youth, youth said the foremost priority within post-war recovery should be the rebuilding of the infrastructure of the society, with particular attention to that of education. These young people also demonstrated tenacity in their quest for education, with many living apart from their families in lean-tos and with scarce provisions to continue their education (Farwell, 2001).

Work appears to be protective for adults, fostering purpose, meaning, and a sense of normalcy when surrounded by the chaos of political violence. Giacaman notes that for her public health program, regrouping the team and embarking on work in the midst of active fighting in the West Bank enabled adults to persevere. Work provided a concrete outlet to investigate the effects of political violence on health and an opportunity for agency, which fostered hope (Giacaman, 2005). Similarly, one Palestinian woman interviewed by Shalhoub-Kevorkian acknowledged work allowed her to use her time effectively and cope with the loss of her home, imprisonment of her brothers, and death of her child (Shalhoub-Kevorkian, 2006).

2.3.5.5 Opportunities for social support

The existence of and ability to access social support is a predominant way both children and adults cope with political violence. In studies with child soldiers, the existence of supportive adults and communities seemed to protect children from the experiences of war (Betancourt, et al., 2010; Cortes & Buchanan, 2007). Use of social support includes peer support along with support from adults and communities; one study of how youth endure political violence found Palestinian adolescents tended to garner support from friends (Nguyen-Gillham, et al., 2008). Two elements of social support appear important: instrumental support (i.e. tangible items and information) and emotional support (that is, comfort and encouragement). Highlighting the importance of instrumental support within contexts of political violence, Farwell (2001) found that informal mutual assistance through activities like pooling money and collectively rebuilding destroyed schools helped Eritrean refugee youth. One illustration of the importance of both types of social support is the study of Bosnian children by Berk (1998), whose findings illustrate the importance of role models who can demonstrate both material resilience (e.g. how to meet basic needs such as procuring water) and emotional

resilience (for example, strategies to engender hope and reduce fear). Two longitudinal studies, one among child soldiers in Sierra Leone, and one among Croatian children, underscore the power of social support over time (Betancourt, et al., 2010; Kuterovac-Jagodic, 2003). Kuterovac-Jagodic (2003), in particular, found that social support did not affect children's PTSD symptoms during active fighting, but social support was protective over time (Kuterovac-Jagodic, 2003).

Several studies with adults have also demonstrated the importance of social support in building resilience for those affected by political violence (Hobfoll, Mancini, Hall, Canetti, Bonanno, G. A. (2011). 2011; Khamis, 1993; Lykes, Beristain, & Perez-Armioan, (2007). One study illustrates not only the importance of social support, but also the importance of participants' satisfaction with their social support in protecting adults from the mental health effects of exposure to political violence (Punama_ki, et al., 2005). An additional finding from this study was that high social support partially mediated the relationship between military violence and mental health; military violence increased social support, which decreased mental health symptoms (Punama_Ki, et al., 2005). Building a sense of collectivity and engaging in shared struggle may be a particularly important manifestation of social support; for instance, Shalboub-Kevorkian (2006) described how women's mutual reliance and their rebuilding and reclaiming of physical and symbolic locations of home enabled them to endure closures of roads and areas, bombings, and house demolitions within political violence. Reflecting these findings, a sense of collective belonging not only to community but to country may be an important way that social support builds protection within political violence (Nuttman-Shwartz, 2012). Findings from a recent study, however, illustrate an alternate theory of the role of social support within contexts of political violence. Taylor et al. (2012) found that social support protected mental health from

the negative effects of non sectarian violence, but exacerbated mental health problems resulting from sectarian (political) violence.

Authors note this finding is in line with a “depletion hypothesis”, wherein increased interdependence actually increases stress. Communal coping thus represents both advantages and disadvantages for individuals (Lyons, Mickelson, Sullivan, & Coyne, 1998). The multi-dimensional aspects of shared coping may be particularly acute within political violence; indeed, researchers have found that political violence overwhelms coping resources (Hobfoll, et al., 2011; Norris & Kaniasty, 1996).

2.3.5.6 Opportunities for accountability

In cases of extreme traumatic stress due to political violence, the opportunity for individuals to assign blame and accountability may be helpful in making meaning of and recovering from the suffering of political violence (Summerfield, 1999). Thus, processes of accountability through communal activities like tribunals and truth commissions take on particular importance in terms of sustaining resilience after political violence (Farwell & Cole, 2001; Robben, 2005). Lykes et al. studied the criminal and civil trials brought about by adults within Indigenous communities in Guatemala. These researchers concluded that, while participants faced potential threats due to their testimony, the process of testifying endowed them with a sense that they were standing up for accurate representation of the facts of history and thus promoting social justice; this, in turn, endowed participants with a sense of power and helped to maintain a positive self-image (Lykes, et al., 2007). Resources that promote resilience within political violence include school or work, social support, opportunities for civic and political engagement and avenues for official accountability for

atrocities committed during political violence. Individuals can rally these resources, however, only to the degree that they exist within the environment.

Social support has been defined as the assistance or comfort to other people to help them cope with a variety of problems. Support comes from interpersonal relationships, family members, neighbours, religious groups and friends. This support provides positive effect in times of stress (Psychology Dictionary) <http://psychologydictionary.org/social-support>). It is also the support that is available to an individual through social ties to other individuals, groups and the larger community. It has also been defined as a network of family, friends, neighbors and community members who are available in times of need to give psychological and financial help (www.cancer.gov).

Social support has also been conceptualized to involve developing and nurturing friendships; seeking resilient role models and learning from them (Ballenger-Browning & Johnson, 2010). Social support has been conceptualized in two broad ways; structural and functional support. Social ties such as marriage, family, religious groups and other groups form the structural support (McNally, Ben-Shlomo, & Newman, 1999). These are important sources of social support. Structural thinking emphasizes on belonging to groups, where individuals have shared values or beliefs that can have significant influence on their cognitions, affect, behaviour and biological responses. Social network can reduce psychological despair and increase the motivation of caring for oneself (Van Dam, van der Horst, Knoop, Ryckman, Crebolder, & van den Borne, 2005). Research has also conceptualized social support as care, value and guidance provided by the family, peers and community members (Smith, Ortiz, Steffen, Tooley, Wiggins, Yeater, Montoya & Bernard, 2011). The functional dimension of social support involves emotional components such as love and empathy. It also includes instrumental or practical support such as giving gifts of money or assistance with child care

(Charney, 2004). It is evident that social support is an expansive construct that offers emotional comfort to individuals at the time of adversity. This support may be offered by family, friends and other significant persons in and groups in an individual's life (Dollete, Steese, & Mathews, 2006).

Studies have shown that resilient individuals are more likely to have more social support than non-resilient individuals (Hickling *et al.*, 2011; Lee *et al.*, 2011; Prati & Pietrantonio, 2010; Simmons & Yoder, 2013; Waters, 2002; Smith, Ortiz, Steffen, Tooley, Wiggins, Yeater, Montoya, & Bernard, (2011). An investigation on resilience in service member indicated that it is important for service members to receive support from their colleagues because it would increase the feeling of belonging and personal control (Simons & Yoder, 2013). The same study also mentioned that adequate social support may prevent post-traumatic stress disorder (PTSD) during the transition period from military to home. Traumatized people with high social support have indicated high resilient levels than those with low social support (Ozbay, Douglas, & Southwick (2007). In a study on US soldiers returning home from operations in Iraq, Pietzak, Johnson, Goldstein, Malley and Southwick (2009) determined that higher resilience levels were evident in those who adequately utilized post-deployment social support as compared to those who did not appreciate the support given. It is therefore evident that social support is important in nurturing and reinforcing resilience in the lives of traumatized individuals. The researcher contends that social support is important in preventing posttraumatic stress disorder (PTSD) and therefore and important in boosting resilience of traumatized individuals.

2.3.5.6.1 Effective Social Support as a moderating factor in resilience

A survey study on war affected youths in northern Uganda showed that family connectedness and social support were important in lowering the levels of emotional distress and promoting

better social functioning (Annan & Blattman, 2006). A study of childhood sexual abuse survivors, indicated that a combination of self-esteem support (the individual perceives that he or she is valued by others) and appraisal support (individual perceives that her or she is capable of getting advice when coping with difficulties) was important in preventing the development of PTSD (Hyman, Gold & Cott, 2003). Studies on children have observed the interactions between social support and gender and have indicated that girls receive higher social support at times of adversity compared to boys. This type of support helps to moderate the traumatic distress in individuals (Hyman, Gold & Cott, 2003).

Effective social support is determined by the size of the network and the frequency of interactions and also how rewarding it is emotionally and physically. Social support comes in the form of emotional reassurance that can be instrumental in helping out with the immediate tasks of daily living or provision of information about how to do something or deciding on the best course of actions to be taken (Kaniasty & Norris, 2009). Positive social support makes one feel confident that help is forthcoming or the pain will heal. It also facilitates access to material resources such as food, clothing and shelter, and to financial, educational, medical and employment assistance (Ungar *et al.*, 2007).

Several studies have found social support as a strong indicator of resilience, particularly the larger support network of an individual (Chang & Taormina, 2011; DiMaggio *et al.*, 2008; Hickling *et al.*, 2011; Lee *et al.*, 2011; McAllistar & McKinnon, 2009; Prati & Pietrantonio, 2010; Simmons & Yoder, 2013; Smith *et al.*, 2011; Solomon, Berger, & Ginzburg 2007). In a literature review study investigating resilience, military personnel social support was seen to be a strong indicator of resilience and also important in preventing post-traumatic stress disorder, particularly in the transition period from military to home (Simmons & Yoder, 2013). Another study by Devenson (2003) appreciates that while social support is an

indicator to resilience, the quality of the social support should always be taken into account. In another literature review on health professionals, the importance of community support in promoting resilient levels of individuals is explored. This involves strong connectedness to the social environment, and also the satisfactions of these relationships (McAllister & McKinnon, 2009; Chang & Taormina, 2011). In a cross sectional study of body handlers, the researchers emphasized the importance of cohesive communities and religious communities in bolstering resilience (Solomon & Ginzburg, 2007).

2.3.5.6.2 Family systems and the communication processes

In cases where there is low social support there is usually a high degree of social strain being exhibited such as developing symptoms of posttraumatic stress disorder (PTSD). Studies on family resilience have provided a framework that contains three domains of family functions; the belief systems, organizational patterns and communications processes (Walsh, 2003). Beliefs assist families to create meaning in times of crisis and promote optimism and encouragement. The family members rely on each other, motivate and encourage each other. Resilient families remain hopeful, focus on their strengths, adopt a can do attitude and accept the aspects of the situations that are out of control (Knowles, Garrison, & Betsy, 2010). The communications processes in the family include the ability to maintain clarity in crises situations. The family does this by communicating clear messages about crisis and also sharing and empathizing their feeling towards each other. They also work together, brainstorm and identify the required resources to make decisions that can help them recover from the adversity (Walsh, 2003). The family members provide each other with love, care, comfort and emotional support which are important aspects in building resilience after adversity.

Social support is an important aspect as it is seen to promote positive mental health in the military. Studies have shown that when new recruits are being socialized to the army culture, it involves learning to rely on team members and to look out for them in order to accomplish a mission (Greenberg & Jones, 2011). Socialization is seen as a key element of a socially supportive environment which could have boosted the psychological and physical well-being of the soldiers. The process of socialization in the military starts during the orientation and basic military trainings and aims to indoctrinate the recruits into the military culture (McGurk, Cotting, Britt, & Adler, 2006).

2.3.5.6.3 The Functional Model regarding social support

The functional model is more specific if the social support being provided is useful and timely. The activities involved in this model include aiding emotionally focused coping, giving relevant information or assisting with problem solving. The model suggests that social support is meant to fulfil an overt or implicit need that if not met will lead to distress and if successfully met will lead to amelioration. Functional social support has links to the hypothesis of stress buffering which was first coined by Cassel (1976) and Cobb (1976). They suggested that individuals are at the risk of developing mental and physical disorders because of confusing or absent feedback from their socials environment. A social environment that provides appropriate feedback and rewards to an individual helps in buffering stress related issues. In summary, there are considerable studies suggesting that social support is an important factor that can contribute to resilience after trauma. Social support should be need- based, adequate and timely.

2.4 CHAPTER SUMMARY

This chapter has presented related literature by reviewing empirical research studies on the internal and external factors that contribute to resilience after trauma. It conceptualizes resilience and factors which affect one's resilience namely: spirituality, personality, social

support, gender and age. It also highlights the historical status of resilience and trauma, and how this is linked to this study. Finally the chapter expounds on contextual terminologies used in the entire study.

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.1 CHAPTER OVERVIEW

This chapter discusses the research design, instrumentation, research setting, sampling strategy, data collection procedure, reliability, validity, data analysis and ethical considerations.

3.2 RESEARCH DESIGN

The study is philosophically underpinned in the descriptive-interpretive qualitative research applied within a mixed method design. The descriptive aspect addresses questions such as: What kinds or varieties does the phenomenon appear in? What aspects does it have? In this case, this study explores kinds/aspects of or factors that lead to resilience after trauma among the internally displaced persons. On the other hand, the interpretive aspect attempts to answer questions such as: Why does the phenomenon come about? How does it unfold over time? This dimension looks at how factors contributing to resilience come about and how such factors unfold over a certain time span.

This study employed mixed methods research design which is a procedure for collecting, analysing and “mixing” both quantitative and qualitative research methods in a single study in order to understand a research problem better (Creswell, 2012). Quantitative research method enabled the researcher to quantify variables of interest and to answer the measurable questions such as responses from the resilience scale and the personality scale. Qualitative research method was used in the study to answer the research questions that covered generally the views of the individuals with the hope to enable the researcher analyse themes and conduct the inquiry in a subjective manner. The combined method was used to allow the

researcher to gain an in-depth understanding of the factors that contribute to resilience after trauma. The mixed methods research design was utilized, mixed methods designs “incorporate techniques from both the qualitative and quantitative research traditions yet combine them in unique ways to answer research questions that could not be answered in any other way” (Tashakkori & Teddlie, 1998.). In mixed methods research, both qualitative and quantitative research methods are mixed at some stage of the research process allowing researchers to explore and understand a research question more completely (Creswell & Plano Clark, 2011). Many disciplines including psychology and anthropology have recognized that research endeavour can be maximized using a mix of qualitative and quantitative methods (Nastasi & Schensul, 2005). Similarly, Creswell, Plano Clark, Gutmann, and Hanson (2003) noted that using mixed-methods research can neutralize or cancel out some disadvantages inherent to certain methods and mixing different methods can strengthen a study. According to Creswell and Zhang (2009), this design procedure is well-suited for trauma-related research; mixed methods build upon a need to bridge research which tends to be characterized by a reliance on quantitative methods and practice heavily using qualitative data collection and analysis.

Creswell and Plano Clark (2011) differentiates between fixed and emergent mixed methods study designs and also typology-based and dynamic approaches to mixed methods studies. In fixed mixed methods designs, the use of qualitative and quantitative research methods is predetermined at the start of the research process; on the other hand, in emergent mixed method designs, the use of mixed methods arises during the process of research. For example, a researcher might think one method as inadequate and add a second method to the study design. Identifying an approach to design is also important. Useful mixed methods designs are classified and a particular design is selected based on the aims of a particular study in typology-based approaches. The authors have summarized fifteen classifications representing diverse disciplines with different terminologies and differential focus on important features of

the mixed methods research. In contrast, dynamic approaches does not place emphasis on selecting the appropriate design, instead it focuses on interrelating multiple components of research design. Creswell and Plano Clark have proposed to use typologies as a guiding framework for helping researchers design their studies rather than adopting them as cookbook recipes (p. 60).

Consistent with the aims of the present study and the lack of an empirically tested and verified framework for resilience, sequential exploratory design was chosen as suitable for conducting a comprehensive analysis on resilience in the survivors of the fire tragedy. The mixed methods sequential exploratory design includes two phases of research (Creswell, Plano Clark, Gutmann, & Hanson, 2003). In exploratory design, qualitative data are collected and analyzed in the first sequence. As a second step, quantitative data are collected and analyzed. It is a two-phase research design: Quantitative phase builds on the first, qualitative phase and these phases are connected together for explaining and discussing the results from both strands of collected data. Exploratory sequential design is conducted with the intent to explore a research objective for several reasons. Broadly, these are to develop and test measures or instruments which are not readily available, to identify variables in the qualitative phase and to study them quantitatively in the second phase, and to study aspects of an emergent framework or theory.

To attain a complete understanding of psychological resilience in fire survivors and to ensure comprehensiveness of study results, a mix of qualitative and quantitative research methods were employed in the present study. The aim for choosing sequential exploratory design was the lack of a verified framework for explaining psychological resilience. As in every mixed-methods design, the critical components of the sequential exploratory design is (1) the level

of interaction between the qualitative and quantitative strands, (2) the relative priority of the strands, (3) the timing of the strands, and (4) the procedures for mixing the strands (Creswell & Plano Clark, 2011). The level of interaction between strands can be independent and interactive. When the level is independent, research questions, data collection and analysis are separate and those are only mixed during interpretation. On the other hand, if the level is interactive, two methods are mixed before interpretation. In addition, the priority between strands can be equal or weighting can be given to a particular strand. Timing is also referred as pacing or implementation. The temporal relationship between qualitative and quantitative strands can be concurrent, sequential or there can be a multiphase combination. Finally, data can be mixed during interpretation, during data analysis, during data collection, or at the level of design.

This study utilized a *quantitative priority*. The relative weight was given to the quantitative study while the qualitative study played a secondary role. Morgan (1998) views designating one method as the principal means of data collection as a more practical strategy compared to giving equal weight to both methods; it also removes the threat that the knowledge gained from two methods may be either incommensurate or contradictory.

3.3 RESEARCH INSTRUMENTS

The main instruments used to collect data in the current study were: questionnaires, Big Five Inventory (BFI), resilience scale and unstructured interview schedule. The BFI was relevant as an instrument of data collection in the current study because it provided an integrative function which represented diverse systems of personality. It also captured the commonalities in the personalities of the individuals. The researcher was also motivated to use the BFI because research shows that to date its constructs have represented a widely acceptable,

comprehensive and ample frame that delineates the structure of core personality traits (Frieder, Dennis, Oliver, & Gert, 2011) The questionnaire instrument comprised closed-ended items to allow respondents provide only appropriate responses for the study. The closed-ended items limited respondents from digressing which would have elicited painful emotions and memories. The four instruments of data collection that were used in the study were social support and spirituality questionnaires, by the Big Five inventory (BFI) version 4a and 54 Berkeley (John, Donahue, & Kentle, 1991; John, Naumann, & Soto, J. 2008 – used with permission) and the 25 item Connor-Davidson Resilience Scale 25 (CD-RISC-25) (used with permission) (Connor, & Davidson, 2003). The researcher and the research assistants also used observation to get an in depth feelings and experiences of the participants of the study.

According to John, Donahue, & Kentle, 1991) BFI is a 44-item self-report inventory on a five point Likert scale ranging from 1 (disagree strongly) to 5 (agree strongly). It is used for assessing five personality traits: openness to experience, conscientiousness, extraversion, agreeableness and neuroticism. BFI 44-item version contains 8 items that pertain to traits associated with Extraversion and Neuroticism, 9 items pertain to traits associated with Agreeableness and Conscientiousness, and 10 items pertain to traits associated with Openness.

The BFI was developed because of the need for a short instrument to measure the Big Five personality domains: Neuroticism (N), Extraversion (E), Agreeableness (A), Conscientious (C), and Openness to Experience (O). All items consist of short phrases (for brevity and simplicity) based on the trait adjectives (for example, is talkative, is depressed, tends to be lazy) and some items have additional clarification to avoid ambiguity (for example, is original, comes up with new ideas). The Big Five BFI was derived from factor analyses of the

language people use to describe themselves with respect to emotion, thought, and behaviour, and others around them and do not represent a particular theoretical perspective (Plaisant, Courtois, Réveillère, Mendelsohn, & John, 2010). The BFI has been used widely in different languages and cultures (Jensen-Campbell, Knack, Waldrip, & Campbell, 2007) such as in French (Plaisant, Courtois, Réveillère, Mendelsohn, & John, 2010), Turkish (Karaman, Dogan, & Coban, 2010), Korean Americans (Roesch et al., 2006), and German (Hahn, Gottschling, & Spinath, 2012).

One of the largest studies that was conducted using the BFI 44-item version translated it into 28 languages. It was administered to 17,837 individuals from 56 nations. The internal reliability Cronbach's alphas of the BFI scales across all cultures were .77, .70, .78, .79, and .76 for Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness, respectively. An Arabic version was administered on sample of 275 Jordan College students, the Cronbach alpha was calculated for all region of Middle East and it were .74, .67, .77, .76, and .75 for Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness, respectively (Schmitt, Allik, McCrae, & Benet-Martínez, 2007). The BFI is considered reliable, valid, and is widely used to measure the Big Five personality domains (John et al., 2008) and has amassed substantial data from use with college students. Srivastava, John, Gosling, and Potter (2003) provided descriptive statistics of the BFI in a large sample ($N = 132,515$) aged 21 to 60 year olds. For 21 years old participants ($N = 6076$): Neuroticism ($M = 3.32, SD = .82$), Extraversion ($M = 3.25, SD = .90$), Agreeableness ($M = 3.64, SD = .72$), Conscientious ($M = 3.45, SD = .73$), and Openness to Experience ($M = 3.92, SD = .66$).

3.3.1 Connor-Davidson Resilience Scale (CD-RISC)

Developed in 2003, the CD-RISC is used to assess multiple aspects within people that demonstrate resiliency of an individual over time. The CD-RISC consists of 25 questions that the individual answers on a 5-point Likert scale, where higher scores reflect a greater degree of resilience within the individual (Connor & Davidson, 2003). The CD-RISC measures the total resilience of individual assessing areas such as personal competence, trust in one's instincts, tolerance and the effects of stress (Connor & Davison, 2003). The scale is used to examine responses by individuals to determine how resilient an individual is at a particular moment. The reliability, validity, and factor analytic structure of the scale were previously evaluated. Connor and Davidson (2003) report a Cronbach's alpha of 0.89 ($n = 577$) with item-total correlations ranging from 0.30 to 0.70. CD-RISC scores demonstrate an intra-class correlation coefficient of 0.87 and test-retest reliability coefficients of .87 as has been shown in previous studies (Brown, 2008, Connor & Davison, 2003).

The CD-RISC is a measure of stress-coping ability (or ability to cope with adversity). The original scale consists of 25 items rated on a 5-point scale ranging from "not true at all" (0) to "true nearly all the time" (4). Higher scores indicate higher levels of resilience. In the sample of general population, the scale yielded five factors. Factor 1 was related to personal competence, high standards, and tenacity; factor 2 to trust in one's instincts, tolerance of negative affect, and strengthening effects of stress; factor 3 to the positive acceptance of change, and secure relationships; factor 4 to control; and factor 5 to spiritual influences. Connor and Davidson (2003) tested the psychometric properties of the scale with over 1000 participants in different samples. Cronbach's alpha for the full scale was 0.89 in general population indicating good internal consistency. Favourable test-retest reliability of the scale was demonstrated in GAD and PTSD clinical trial subjects who showed a high level of

agreement (intra-class correlation coefficient = .87). Convergent validity of the scale was tested using measures of hardiness, perceived stress, perceived stress vulnerability, disability, and social support. The scale was positively correlated with hardiness (psychiatric outpatient group, $n = 30$; Pearson $r = .83$, $p < .0001$), and social support ($n = 589$, Spearman $r = .36$, $p < .0001$), and negatively correlated with perceived stress (psychiatric outpatient group, $n = 24$; Pearson $r = -.76$, $p < .001$), with stress vulnerability (combined sample, $n = 591$, Spearman $r = -.32$, $p < .0001$), with disability (psychiatric outpatient and GAD clinical trial subject groups, $n = 40$, Pearson $r = -.62$, $p < .0001$). Finally, the scale had discriminant validity as shown by its lack of significant correlation with Arizona Sexual Experience Scale in GAD clinical trial subjects. The authors concluded that the scale has sound psychometric properties and can be used in both clinical practice and research as a brief, self-rated measure of resilience. Moreover, the scale was not developed for a specific population; therefore, can be applied in various settings.

25-item CD-RISC was also used in other samples such as the Turkish sample of 246 individuals exposed to the devastating effects of the 1999 Marmara Earthquake (Karairmak, 2010). Although the scale yielded five factors, the factor loadings were dissimilar to the original scale and there were only two items in two factors. Therefore, the exploratory factor analysis was extracted a second time with three factors explaining 52% of the variance, and item 2 was excluded since the factor loading for this item did not exceed .30. The factors were named as tenacity and personal competence (15 items), tolerance of negative affect (6 items) and tendency toward spirituality (3 items). Evidence for convergent and discriminant validity of the scale was obtained through testing the scale's correlations with related constructs. CD-RISC scores were positively correlated with positive affect scores ($r = .69$, $p < .001$) and negatively correlated with negative affect scores ($r = .44$, $p < .001$). Moreover,

self-esteem ($r = .53, p < .001$), optimism ($r = .55, p < .001$) and hope ($r = .68, p < .001$) were positively correlated with resilience. Cronbach's alpha for the total scale was found to be .92 indicating good internal reliability. The coefficients were .93, .79, and .50 for the subscales labeled as tenacity and personal competence, tolerance of negative affect and tendency toward spirituality, respectively. The reliability coefficient for the last factors was discussed as adequate since the number of items in that subscale was three. Finally, confirmatory factor analysis yielded acceptable fit to the data for the current sample as indicated by a significant Chi-square of the measurement model, $\chi^2(223) = 450.87, p < .001$.

Different studies have revealed a range of different factor structures, in present study the CD-RISC was used to evaluate psychometric properties in a sample of adults exposed to trauma after a fire tragedy six years later. The CD-RISC was preferred instrument in the current study because it is easily read and comprehended. The CD-RISC could also be easily translated easily into the languages familiar with the respondents, specifically Kiswahili and Kikuyu.

3.3.2 Social support questionnaire and spirituality questionnaire

The social support questionnaire used in this study comprises 19 item self-report measures on a five point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). These statements were exploring specific sources of support such as family, friends, neighbours, church members, religious leaders, professional workers and the community leaders. Each respondent was asked to indicate whether they strongly agree, agree, not sure, disagree and strongly disagree. The responses from each participant in the study were averaged with scores indicating increased social support. The spirituality questionnaire used in the current study comprises 13 self-report measures on a five Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). These statements were exploring specific spirituality matters such as

beliefs, reading the Bible or Koran or any other spiritual material. The questionnaire also explored the significance of prayer, forgiveness and closeness to God in the respondents lives. Each respondent was asked to indicate whether they strongly agree, agree, not sure, disagree and strongly disagree. The responses from each participant in the study were averaged with increased scores indicating increased importance and influence of spirituality in the individual's lives.

This questionnaire was pre-tested through pilot study to check on its reliability. This was done by the researcher and assisted by the research assistants. The pilot study was carried out in Yamumbi camp for the internally displaced persons. The camp is located 30 kilometres away from Kiambaa village. The purpose of the pilot study was to provide the researcher an opportunity to develop consistent practices which would enhance data integrity and protection of the participants. The Pilot study also ensured good practices which include the refinements of source documentation, informed consent procedures, data collection tools, regulatory reporting procedures, and monitory/oversight procedures especially when multiple sites and investigator are engaged in the study (Leon, Davis, & Kraemer, 2010). The pilot study in the current study was critical in the training of the research assistants and also providing the required experiences that strengthened and confirmed the competences and skills that enabled the investigation to be conducted accurately and precisely.

To determine content validity of the two questionnaires, the researcher sought the assistance of experts from Moi University, School of Arts and Social Sciences Psychology Department who appraised the applicability and suitability of the instruments. The response given was used by the researcher to make the necessary adjustments. Their suggestions and comments were used as a basis for modifying the research items and making them adaptable to the

study. Based on the feedback from these experts, the wordings of the instruments were modified appropriately.

3.3.3 Socio-Demographic questionnaire

This questionnaire provided data that was used to integrate different categories of the respondent's background information. The socio-demographic questionnaire comprised the respondent's age, gender, marital status, education level and employment status or occupation. The categories were significant in determining correlation in resilience levels of the individuals.

3.3.4 Interview Schedule

A semi-structured interview protocol was used to collect in-depth information from survivors of the Kiambaa fire tragedy. According to Patton (2002), semi-structured type of interviewing allows the researcher and the participant to naturally and spontaneously interact on the topic. It offers possibility to personalize questions for immediate situations and also flexibility in obtaining information. Prior to the interviews, a participant information form was provided in order to obtain information regarding participant's socio-demographic characteristics including age, gender, marital status, employment status or occupation, and variables related to the fire tragedy (the place at which the fire tragedy were experienced, family members in the church at the time of the fire, loss of close members of family, injury of self/close ones, change in income, financial loss, psychological problems following the fire tragedy).

The semi-structured interview schedule consisted of questions focusing on the factors perceived by the individuals exposed to the fire tragedy as associated with psychological resilience. The questions followed a logical order, from more general questions to more specific ones. The interview began with a general question regarding psychological

resilience. Interviewees were then asked how resilient they perceived themselves and why. Next, more specific questions for specified domains (for example, personal qualities, coping and attributions) were directed. To expand a given response and improve comprehension, probing questions were provided whenever necessary (for example, “Would you please tell me more about that?”).

3.4 RESEARCH SETTING

In January, 2008 during the post- election violence that erupted because of the disputed presidential elections in Kenya, the Kenya Assemblies of God Church in Kiambaa, in the outskirts of Eldoret in western Kenya. Young people brutally attacked and burned a church in Kiambaa - which housed ethnic Kikuyus who fled from their farms and houses. The attackers pelted the church with rocks to pin down the women, children and elderly people seeking shelter inside. The armed men then slammed the church doors shut. They piled bicycles and mattresses outside the main entrance and blocked a smaller door at the back. Inside the small church, dozens of terrified people huddled together. They were Kikuyus, members of the tribe that has borne the brunt of the violence that followed last week's disputed presidential election. The attackers, members of the rival Kalenjin tribe, poured fuel on the mattresses and piled on dried maize leaves from a nearby field. Then they set the barricades alight and waited until the flames burned high. More than 30 people were burnt to death at Church and several others sustained serious injuries.

The study was carried out in Kiambaa Village, Kabongo sub-location, Ngeria location in Eldoret East sub-County in Kenya. The target population comprised adults above eighteen years. The total adult population in the village was approximately four hundred (400) people. Of this population, 287 were male while 113 were female (IOM, 2009). Following the post-election violence in Kenya, the village of Kiambaa was left depleted and ravaged by the

malice of the two groups trying to revenge. People lost their lives and property and some were forced to live in make-shift camps. The exposure to violence was a stressful experience leading to drastic psychological responses such as dissociation, numbing and hyper arousal (Kenya Red Cross Report, January, 2009). Despite the devastating experience that the Kiambaa residents went through, it is notable that there were some who were resilient enough to overcome the difficulties and continue with their day to day lives. Therefore, this study explored the factors that contributed to the people's resilience after the adversity. The focus of the study was on resilience after the trauma that the people experienced during the violence.

Most of the Kiambaa post-election violence victims were psychologically affected due to the fact that their family members were killed or badly injured; many houses were burnt down leaving them without shelter and they were also evicted and displaced from their pieces of land. They were compelled to live in deplorable conditions in makeshift camps twenty kilometres away from their homes (IOM Report, January, 2008). The resilience after the trauma was central in this study. The study focused on the displaced people of Kiambaa village because it was the most affected village in Kenya during and after the post-election violence. For instance, more than thirty people, most of whom were children perished when the church in which they were taking refuge was set on fire (Kenya Red Cross Report January, 2008). Many families were and are still affected by the adversity. The study endeavoured to find out the factors associated with resilience and on the basis of those factors identify the needed spiritual and social support for people who underwent trauma.

3.5 SAMPLING STRATEGY

Purposive sampling was used in the study. According to Fraenkel and Wallen (2000), purposive sampling is carried out when the researcher purposely uses a sample of individuals

based on the objectives of the study and also based on the specific knowledge of the population to be studied. There are two forms of purposeful sampling: (1) the researcher utilizes personal judgment and decides whether or not the sample will be an adequate representative of the population to be studied (2) the researcher chooses the sample from a group that is not representative of the population but have the necessary information about the population to be effective for the study (Fraenkel & Wallen, 2000). The study focused on the sample population of the people who were in the church at the time of the fire tragedy (50 in number) thirty of whom lost their lives (IOM, 2009). The sample for this study comprised 22 victims of the fire tragedy (11 males and 11 females). These are the individuals who were affected by the fire tragedy, were traumatized and later became resilient. The participants in this study were identified through the assistance of Chiefs, Assistant Chiefs, Social Workers and Elders who were trustworthy and were not biased towards the participants. The Chiefs, Assistant Chiefs, Social Workers and Elders were excluded from the study sample because they were not directly affected by the fire tragedy. The study focused on the individuals who were inside the church at the time of the fire tragedy and were traumatized. The Chiefs, Assistant Chiefs, Social Workers and Elders were the gate-keepers and according to Reeves (2010) were in a position of authority to introduce the researcher to the members of community, whilst sharing their own inside information with the participants. Due to sensitivity of the study topic and participants' fear of the likelihood of being victimized, snowball sampling technique was considered the most suitable strategy of sampling respondents.

3.6 PILOT STUDY

The pilot study was carried out to test the reliability of the research instruments. This was done by the researcher and assisted by the research assistants. The pilot study was carried out

in Yamumbi camp for the internally displaced persons. The camp is located 30 kilometres away from Kiambaa village. The purpose of the pilot study was to provide the researcher with an opportunity to develop consistent practices which would enhance data integrity and protection of the participants. The Pilot study also ensured good practices which include the refinements of source documentation, informed consent procedures, data collection tools, regulatory reporting procedures, and monitory/oversight procedures especially when multiple sites and investigator are engaged in the study (Leon, Davis, & Kraemer, 2010). The pilot study in the current study was critical in the training of the research assistants and also providing the required experiences that strengthened and confirmed the competences and skills that enabled the investigation to be conducted accurately and precisely.

3.7 DATA COLLECTION PROCEDURE

A research permit was obtained from the National Commission for Science Technology and Innovation (NACOSTI), permit number NACOSTI/P/14/2322/1582 (Appendix 19 and 20). Two research assistants were appointed and trained by the researcher on how to administer the research tools and also on ethical issues. The chief, assistant chief and the village elder were consulted to assist the researcher identify the traumatized individuals of the Kiambaa fire tragedy and in rapport building. The researcher planned the first meeting with all the participants in which the participants were informed of the research, the purpose, and the objectives. It gave the researcher an opportunity to answer questions from identified participants to ensure they understood the study well and were able to decide whether to participate in the study or not. Identified participants who agreed to take part in the study were asked to sign a consent form to show their willingness to participate in the study.

Twenty two (22) participants were identified and the researcher assisted by the research assistants interviewed them using the interview guide (see appendix VIII and appendix IX) in

three focus group discussions. The data collected from these focus group discussions concentrated on the participant's opinions, experiences and feelings of the fire tragedy. The researcher felt the focus group discussions were relevant in the study because they provided quick results and helped to generate complex information within a short time. They were also suitable in the current study because they enabled the respondents articulate their thoughts easily, explore and clarify the issues in great detail. They encouraged interaction and the respondents were able to share their experiences on the factors that contributed to their resilience after the trauma. The focus group discussions enabled the researcher to explore in great detail the respondent's diverse perspectives, insights, feeling thoughts, understandings and impressions on the factors that contributed to resilience after the trauma. The focus group discussions provided the researcher with the opportunity to follow up the comments and cross check with the respondents for clarity. This made the discussions to be more interactive and meaningful to both the researcher and the respondents.

Observation was also used to help in providing in depth feeling and experiences of the fire tragedy. The researcher and the researcher assistants planned and booked appointments to visit the participants in their home settings. The four instruments used in the data collection, social support and spirituality questionnaires were administered, followed by the Big Five inventory version 4a and 54 Berkeley (John, Donahue, & Kentle, 1991; John, Naumann, & Soto, 2008 – used with permission). Lastly, the researcher and research assistants administered the 25 item Connor-Davidson Resilience Scale 25 (CD-RISC-25) (used with permission). The participants who could read and write filled the information on their own and those who were unable to read and write were assisted by the researcher and the research assistants. The data collection exercise was carried out for seven days and each participant was interviewed for at least one hour. Focus group discussions were done for three days, two months after the previous data collection of the quantitative data. The group members were

put into three groups, two consisting of seven members and one group had eight. This was important as it enhanced the participation of all the respondents. The first group comprised three males and four females, the second group four males and three females while the third group had four males and four females. The researcher was the leader of the focus group discussions. One research assistant was a secretary and the other assisted with the translation in cases where the respondents could not understand Kiswahili or English.

The unstructured interviews were conducted spontaneously both formally and informally through focus group discussions and the informants verified the findings from the informal discussions. Interpretation of meanings, functions and consequences of participants' behaviour were presented through verbal descriptions, explanations and observations and attempted to answer the research questions by use of quantitative measures.

Data was collected sequentially in two field visits during a three month period. The first field visit was approximately six years after the fire tragedy and the second visit was undertaken two months later. The initial plan was to collect quantitative followed by the qualitative data. The timing decision was given firstly because of practical reasons including the difficulty in implementation during the planting season. Most of the respondents were engaged in tending their farms for planting and it proved difficult for them to be engaged in the study. Consequently, it was anticipated during the designing phase that collection of qualitative data would take relatively shorter time as compared to the collection of the quantitative data. Therefore, the qualitative data was collected before the quantitative data. Secondly, since the qualitative data were treated as a more complementary one than the quantitative data and the quantitative study was informed by the findings from the qualitative study, it was deemed appropriate to collect it in the first field visit.

The strands were mixed during interpretation after collecting and analysing both sets of qualitative and quantitative data. Therefore, different headings and sub-headings in subsequent chapters are devoted to the presentation of qualitative and quantitative studies and another one is devoted to the general discussion of findings from each set. Information on the qualitative or quantitative data analysis is presented in detail.

3.8 RELIABILITY

Reliability can be defined as whether a particular tool or instrument (or technique) would yield the same results if it is repeatedly used by one research or different researchers at once (Serem *et al.*, 2013). The reliability of research tools in this study was ascertained by using the test-retest method whereby the instruments were used more than once, with the different group of people who were internally displaced after the post-election violence. The purpose was to check their reliability. In this case, the research instruments were pre-tested during the pilot study phase and refined before they were used in the actual study. The results of the pre-test were used to compute the reliability coefficient. In this study, the items were considered reliable since they yielded a reliability coefficient of 0.70 and above. This figure is usually considered desirable for consistency levels (Fraenkel & Wallen, 2000).

3.9 VALIDITY

This study established content and face validity to assess the accuracy, meaningfulness, appeal and appearance of the instruments for data collection. Validity of an instrument is the success of a scale in measuring what it sets out to measure so that the differences in individual scores can be taken as representing true differences on the characteristics under study (Koul, 2008); while content validity refers to the subjective agreement among professionals that a scale logically appears to reflect accuracy in what it purports to measure (Kothari, 2004). To determine content validity of the instrument items, the researcher sought the assistance of experts from Moi University, School of Arts and Social Sciences

Psychology Department who appraised the applicability and suitability of the instruments. The response given was used by the researcher to make the necessary adjustments. Their suggestions and comments were used as a basis for modifying the research items and making them adaptable to the study. Based on the feedback from these experts, the wordings of the instruments were modified appropriately.

3.10 DATA ANALYSIS

Responses from research tools were cleaned, coded and entered in the SPSS package. Descriptive data were organized into case study themes and hence presented thematically. Quantitative data were presented in form of cumulative frequency counts and percentages. The mean and standard deviations were computed to quantify the amount of variation or dispersion of resilience among the respondents. Besides, Pearson product moment correlation analysis, Chi square correlation analysis and Spearman rank correlation analysis were computed to establish the relationships between study variables of social support and resilience. The John, Dnahue, and Kentle, (1991) and BFI personality scales were used to classify personality types of respondents while the Connor-Davidson Resilience Scale 25 (CD-RISC-25)(2003) was used to test resilience levels among the respondents based on their responses.

3.11 ETHICAL CONSIDERATIONS

Each individual's consent for participation was sought and the researcher asked the willing participants to sign a consent form after they had been informed and fully understood the details of the study. The details included the aim and objective of the study as well as the degree of their involvement in the study.

All information provided by the respondents was treated in the strictest confidentiality and the researcher was fully responsible for all the data collected by ensuring proper

accountability of the tools and also proper storage of the data. The identity of participants was not revealed to anyone unless with prior permission from the participants. During interviews, the participants were informed that they did not need to reveal their names and the researcher and the research assistants tried at all times to be conscious of ethical issues that arose from the research process and also from our personal philosophies and experiences. The researcher and the research assistants ensured they honoured the participant's experiences by using their words and expressions as often as possible to convey their truth in their experiences during the interviews and focus group discussions. The questionnaires and other research tools were labelled with serial numbers for the purpose of accountability and data analysis. Information obtained was not discussed with other people except the researcher and the supervisor. The researcher informed the participants about this to ensure that they made an informed decision on whether to participate in the study or not. The researcher ensured that the method and use of the data generated did not threaten or harm the participants' physical and psychological well-being or dignity in any way.

The research practices used were ethical and within the context of the community's cultural beliefs and values. The researcher ensured that the respondents were treated with respect and empathy at the time of the study. This was done by accepting the respondent's views and ensuring that they felt comfortable to respond to questions during the interviews and participate actively in the focus group discussion.

The participants were informed to contact the researcher immediately if they felt the information was a threat to their physical and psychological wellbeing. The researcher ensured this was done by promoting openness and accepting any criticism from the respondents. In cases where the respondents felt the study might have made them re-experience trauma they were asked to terminate their participation in the study. All data was

stored safely and participants were free to read the results after being analysed and concluded. The researcher ensured that the participants had a contact address and could consult to arrange for this when the results are published. Finally, the researcher ensured all the data collection tools were professionally administered and that the processes used promoted fairness and justice to all the participants irrespective of age, gender values and beliefs. During the data collection the participation did not report any negative psychological and physical reactions.

3.12 CHAPTER SUMMARY

This chapter has discussed the methodology of the study. Specifically, the study design, instrumentation, the research setting and sampling have been described. Furthermore, data collection procedures, validity and reliability of the instruments and how data was analyzed are also presented. The next chapter presents the analysis of the data.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND FINDINGS

4.1 CHAPTER OVERVIEW

This chapter presents the analysis of the data related to the objectives that this study sought to achieve. The study sought to achieve the following objectives: To find out internal factors that influence resilience among victims of a fire tragedy in Kiambaa village in Eldoret East Sub-County of Uasin Gishu County; To establish external factors that influence resilience among victims of a fire tragedy in Kiambaa village in Eldoret East Sub-County of Uasin Gishu County; To determine significant differences in the factors that influence resilience among victims of different gender of a fire tragedy in Kiambaa village in Eldoret East sub-County of Uasin Gishu County; and, To establish the influence of age on resilience of victims of a fire tragedy in Kiambaa village in Eldoret East Sub-County of Uasin Gishu County. The response rate for this study was 100%. All the questionnaires given out were filled and returned.

Responses from research tools were cleaned, coded and entered in the SPSS package. Descriptive data were organized into themes and hence presented thematically. Quantitative data were presented in form of cumulative frequency counts and percentages. Besides, Pearson product moment correlation analysis and chi-square correlation analysis was computed to establish the relationship between social support and resilience. Qualitative data was grouped in themes and sub-themes and discussed accordingly. The John, Donahue, and Kentle, (1991) and BFI personality scales were used to classify personality types of respondents while the Connor-Davidson Resilience Scale 25 (CD-RISC-25) (2003) was used to test resilience levels among the respondents basing on their responses.

Individual Case Analysis

This section describes samples of six individual participants (cases) selected during the interview schedules and from the sample representing the three age groups and their gender as denoted in Table 4.1. The purpose was to provide an extensive description of the sample and add more in-depth and richer insight (Yin, 2003). These individuals were perceived to be the most traumatized because they were inside the burning church and incurred physical injuries and lost the loved ones in the fire tragedy (source: field data, 2014) . These cases are composed of three females and three males. The cases give a paraphrased overview of their demographic data (age, gender occupation), personality characteristics, spirituality and social support factors. The names of the participants have been concealed for ethical reasons.

Table 4.1: Categorization of individual Cases

Age group	Female	Male
20-35	1	1
36-55	1	1
56-75	1	1

Participant 1:

Age: 30 years (age group 20 -35 years)

Gender: Female

Marital status: married

Occupation: self-employed farmer/ housewife

Education level: primary school

Trauma: loss of child and property

Personality characteristics

The participant indicated that she feels confident, is emotionally stable and rarely gets upset. After the traumatizing experience of the fire tragedy following the post-election violence she decided to move on and overcome the pain, bitterness and anger. She described herself as organized, a good planner, and emotionally stable. Her general perspective about life is positive and this she believes helped her cope with the adversities she faced after the fire tragedy. She explained she was generally talkative, and enjoyed the company of others.

Spirituality

The participant and her family were active members in church, she indicated that she experienced spiritual growth after the adversity and this helped her deal with the trauma. She believed that her spiritual faith gave her hope and motivation which enabled her to stay well during the traumatizing period. She also believed that God's power gave her strength and meaning to move on with life despite the traumatizing issues she faced. Through spirituality, she learnt to forgive her aggressors; this helped her to experience religious purification and peace. She learnt to trust God for protection/security and never doubted his supernatural power. She also indicated that she offered spiritual care to others who were more traumatized which gave her more meaning to life. The participant indicated that she prayed persistently during the time of adversity and she believed God answered her prayers because she experienced peace and emotional calmness.

Social support indicators

The participant explained that she received support from her family members, particularly her husband and parents. She also received substantial support from counselors, social workers, religious groups and volunteers. The participant also indicated that she offered help to others who were more traumatized than her. At the time of the interview, she was actively involved

in church activities which include supporting and encouraging each other. Generally, the participant believed she had adapted and had learnt to cope with the post trauma situations. She indicated she had a strong faith and purposeful life and was optimistic about the future.

Participant 2

Age: 28 (age group 20 - 35 years)

Gender: Male

Marital status: married

Occupation: self -employed - business

Education level: Primary

Trauma: loss of parents and property

Personality characteristics

Participant 2 believed he possesses capabilities to organize and execute courses of action required to manage adversity. He described himself as resourceful and of high self esteem. He believed these personal characteristics helped him cope with the trauma he faced after the adversity. He also indicated that he had high interpersonal abilities such as social skills, problem solving and impulse control. He had secure attachments with his family and friends and this helped him cope with the trauma after the adversity. He also indicated that he was emotionally stable and felt accomplished.

Spirituality

Participant 2 indicated that he lived a spiritual life, he attended church and appreciated that: "God is first in life". He believed he was close to God and that God provided the necessary support he needed at the time of the adversity. He trusted for protection and security after the adversity. He believed he received the miracle and things turned around and he was able to bounce back after the traumatic episode. His source of strength according to him was his ability to forgive and forget; this he said was instrumental in the healing process. He believed

his spirituality helped him deal with anger, bitterness, guilt, aggression, anxiety, panic attacks and fears that he experienced after the fire tragedy.

Social support

The participant received social support from friends, family, counselors, volunteers, spiritual leaders and other agencies. This support he says helped him to learn to appreciate others and got encouraged as he interacted with others and also as they shared the experiences. He believed his family played a major role in enhancing his recovery after the trauma. He indicated that his father and uncle were his role models and his pillar. This participant believed that the attachment he had with his family provided him with love and a sense of belonging. His community members were also instrumental in offering social support although he valued the support from his family members more.

Participant 3

Age: 40 years (age group 36 - 55)

Gender: female

Marital status: widow

Employment status: self-employed - farmer

Education Level: Primary school

Trauma: loss of husband and property

Personality characteristics

Had high feelings of anxiety, anger, guilt, bitterness and was often in depressed moods. She was fond of blaming others for negative issues in her life and tended to be sensitive and shy. Problems overwhelmed her and during the time of the fire tragedy, she developed serious depressive episodes. She was in a state of denial for a long time and said she rarely shared her feelings with others.

Spirituality

Participant 3 indicated that she was an active member of her local church and participated regularly in church activities. She participated in the church support group and fellowships and these activities boosted her morale and spirituality. Her spiritual life was a strong part of her that gave her a new phase in her life after the trauma. She indicated that her spirituality had given her a new meaning of life. She was at peace because through her spirituality she learnt about forgiveness and this helped her deal with the feelings of anger, bitterness, anxiety and depressed moods. Spirituality gave her a new meaning of life after the adversity.

Social support

Participant 3 three indicated that she had adapted well to the trauma and loss she encountered after the fire tragedy. She received social support from family, friends, relatives, counselors, social workers, government health workers and other community based workers. The participant believed the social support from family and others provided her with understanding, companionship, and sense of belonging and positive self regard. This participant also indicated that she was engaged in offering support activities to others because she had understood the importance of social support and the positive outcomes it contributes to stressed individuals.

Participant 4

Age: 40 years (age group 36 - 55)

Gender: male

Marital status: married

Employment status: self-employed - farmer

Education Level: primary school

Trauma: loss of son and property

Personality characteristics

Participant 4 indicated that he had a strong sense of commitment, sense of meaningfulness and ability to view stressful events as challenges. He described himself as strong and gifted. He had a high sense of humor and also high self esteem. He believed his personality gave him the ability to endure the effect of the traumatic situations he faced after the fire tragedy. He indicated that he had ability to adapt to change and was able to use past experiences to confront stressful situations.

Spirituality

Participant 4 did not belong to any spiritual affiliation; he said he enjoyed sharing and speaking about spiritual matters and also believed that there was a supernatural power. He also claimed he had faith in God and knew that he received help from him, but he had not been involved in spiritual activities nor was he a member of any church or religious group.

Social support

Participant 4 received social support from family, friends, and spiritual leaders, counselors and other agencies. He believed he benefited from the support because he was open and preferred to share his problems with others. This suggests that some men can be able to open up about their feelings. This enables them to receive empathy and more social support from friends and family. He also felt the support he received from the community helped him at the time of the adversity. He also indicated he had secure attachment with his family and friends and they supported each other at the time of the tragedy.

Participant 5

Age: 65 years (age group 56 - 75)

Gender: female

Marital status: widow

Employment status: self employed - farmer

Education Level: not enrolled in any formal education

Trauma: loss of a relative and property

Personality characteristics

Participant 5 described herself as a woman of high self-esteem and could easily adapt to change. This, she believed, helped her cope with the adversity. Her approach to life was action oriented and she set her personal goals on how to survive after the adversity and this helped her deal with the trauma and subsequent losses. She believed she would adjust because she had experienced similar episodes before and had managed to move on. She had matured after going through the experience of losing a loved one. She believed that the tough episodes she had experienced gave her more courage to develop coping strategies. She described herself as a patient and loving person who forgave willingly the neighbors who violently harmed them.

Spirituality

The participant indicated that she was a staunch member of her local Christian church and she loved singing in the church choir. She cherished being involved in the activities of the church, such as helping others through fellowship meetings and home visits. Her spirituality was a great resource and she had faith she could overcome any stress/adversity. She spoke passionately of her religious beliefs and believed God was in control of every situation. During the time of the tragedy she totally surrendered all her tribulations to God; this gave her peace and motivation to move on. She did not take pride of any personal achievements. According to her, "all the glory and honour goes to God, without Him I would not have made it".

Social support

Participant 5 received substantial social support from family, relatives, friends, health professionals, community members and other agencies. She noted that the social support was

instrumental to her during the healing process. After she recovered from the trauma, she engaged in providing social support to others who were experiencing regression and were taking too long to recover. The participant believed that through social support she developed secure attachment with others particularly members of her family and members of the community.

Participant 6

Age: 75 years (age group 56 - 75)

Gender: male

Marital status: married

Employment status: self-employed - poultry farmer

Education Level: not enrolled in any formal education

Trauma: loss of daughter, grandchild and property

Personality characteristics

Participant 5 described himself as patient, tolerant and optimistic about the future. He had encountered adversities in the past and he was not overwhelmed. He believed he had a powerful internal locus control and had the ability to adopt to change. At the age of 75, he was able to set personal or collective goals and organize issues well. He indicated that he was committed to live a meaningful and resourceful life. He admitted that he was severely affected by the tragedy but he chose to be strong and courageous and moved on despite the trauma her was experiencing.

Spirituality

The participant believed his spirituality assisted him cope with the trauma. It gave him hope and confidence to move on. He said "it is comforting to know you are not alone, but there is a higher power watching over you". He believed God bailed him out of the pain and anguish he

was experiencing after the trauma. He prayed persistently and God answered his prayers and for him, God was his great source of strength.

Social support

The participant received social support from family, relatives, friends, counselors, social workers, members of the community, and religious leaders. The participant received emotional support, instrumental support and informational support. He indicated that the social support helped him to overcome the stresses he faced after the adversity. He appreciated all types of support he received.

4.2 DEMOGRAPHIC DATA

The sample comprised of eleven (11) males and eleven (11) females as illustrated in Figure

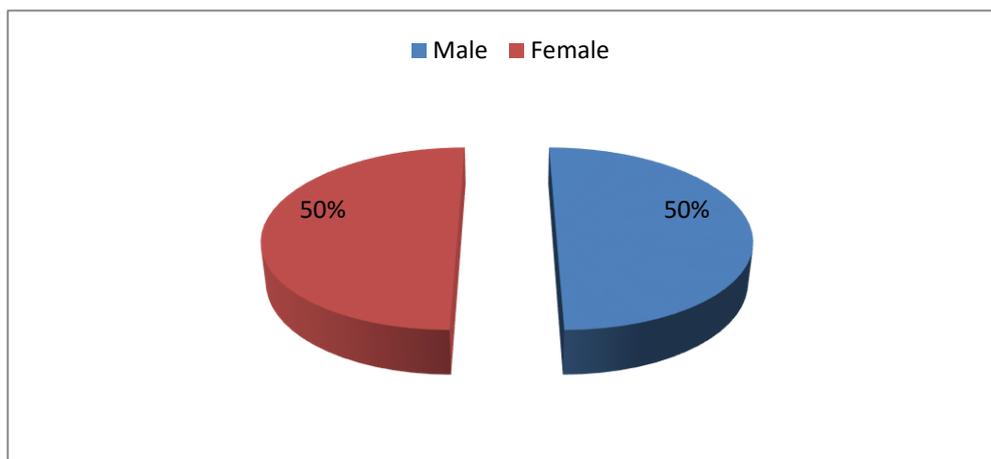


Figure 4.1: Proportion of Respondents by Gender

Source: Field Data (2014)

A proportion of 36.4% (8) of the respondents were aged between 20 and 35, 45.4% (10) were aged between 36 and 55, while 18.2% (4) were aged between 56 and 75. Figure 4.2 illustrates this information.

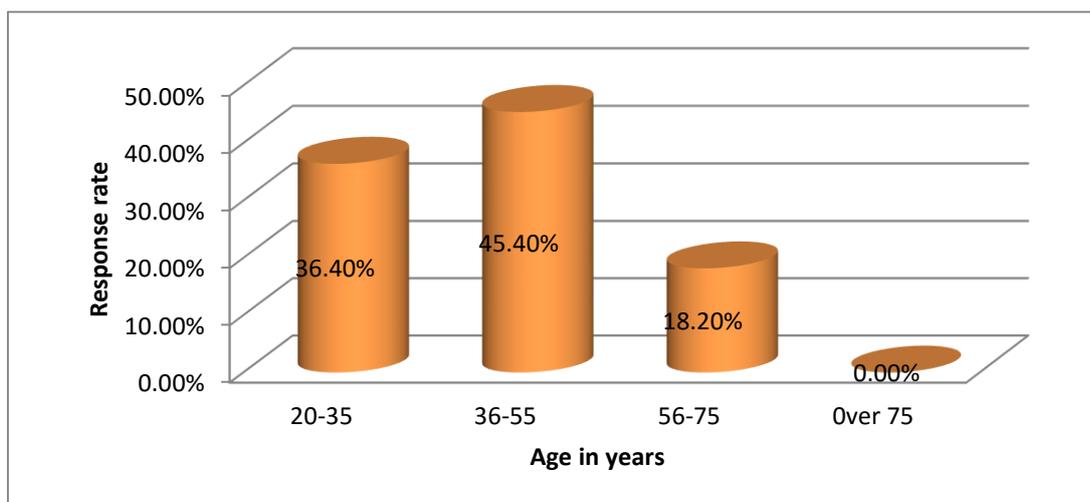


Figure 4.2: Proportion of Respondents by Age

Source: Field Data (2014)

The study also sought to establish the education level of the respondents. A majority of the respondents (68.2%; 15) had attained primary education. Those who had attained A/O-Level education accounted for 22.7% (5) of the respondents while 9.1% (2) had attained undergraduate level of university education. Table 4.2 presents these findings.

Table 4.2: Proportion of Respondents by Education Level

Level of Education	Frequency	Percentage
Primary	15	68.2
A/O-Level	5	22.7
Undergraduate	2	9.1
Total	22	100.0

Source: Field Data (2014)

The study also compiled information on the marital status as well as the occupation of the respondents. A majority of the respondents (63.6%; 14) were married while 36.4% (8) were widowed. None of the respondents was single. A proportion of 72.7% (16) of the respondents

were self-employed, 9.1% (2) were salaried while 18.2% were unemployed. Table 4.3 illustrates this information.

Table 4.3: Proportion of Respondents by Marital Status and Occupation

Marital status	Frequency	Percentage
Married	14	63.6
Widowed	8	36.4
Single	0	0.0
Total	22 100.0	
Occupation	Frequency	Percentage
Self employed	16	72.7
Salaried	2	9.1
Unemployed	4	18.2
Total	22	100.0

Source: Field Data (2014)

The study also categorized respondents based on their personality characteristics. Five personality types were identifiable among the respondents: extraversion; conscientiousness; neurotism; agreeableness; and, openness to experience. Majority of the respondents exhibited extraversion and neurotism personality characteristics, 27.3% for each personality type. This means that at least 2 in every 10 respondents exhibited extraversion and neurotism and extraversion personality characteristics. Those respondents who exhibited agreeableness and openness to experience personality characteristics in their behaviours accounted for 13.6% and 22.7% of the sample respectively. The least proportion of respondents (9.1%) exhibited personality characteristics associated with openness to experience personality type. This information is summarized in Table 4.4.

Table 4.4: Distribution of respondents by personality characteristics

Personality Characteristic	Frequency	Percentage
Extraversion	6	27.3
Conscientiousness	4	13.6
Neurotism	6	27.3
Agreeableness	5	22.7
Openness to experience	2	9.1
Total	22	100.0

Source: Field Data (2014)

4.3 INTERNAL FACTORS THAT INFLUENCED RESILIENCE AMONG VICTIMS OF THE FIRE TRAGEDY IN KIAMBAA

The study identified three key internal factors that influenced resilience levels among the study respondents. These factors were age, gender, and personality.

4.3.1 Age and Resilience

The Connor-Davidson Resilience Scale 25 (CD-RISC-25) was used to assess the extent to which internal factors influenced resilience levels among respondents. Score range for the 25-item scale was from 0-100 where a higher value indicated higher resilience. Respondents' responses were measured on a resilience value-rated five-point Likert scale.

Age, Gender and Resilience

The mean resilience scores for the male respondents aged between 20-35 were 59.35 while the females score was 58. The age group of 36 to 55 had mean resilience score of 63.40 and 60.20 males and females respectively. The older age group of 56 – 75 had higher mean resilience scores of 65.67 and 61.50 males and females respectively. The oldest respondent in the sample was a female over 75 years old with a resilience score of 57.

The values of the standard deviation are relatively small and this shows how tightly these are clustered around the mean. The values are tightly bunched together and the bell-shaped curve is steep; the standard deviation is small as opposed to when they are spread apart to make the bell curve relatively flat. There was no significant difference between the male and female respondents with respect to age but there was a significant difference between age and level of resilience whereby resilience increased with age.

The mean resilience scores for the male respondents aged 20-35 were 59.35 while the females score was 58. The age group of 36 to 55 had mean resilience score of 63.40 and 60.20 males and females respectively. The older age group of 56 – 75 had higher mean resilience scores of 65.67 and 61.50 males and females respectively. The oldest respondent

in the sample was a female over 75 years old with low resilience score of 57. This information is denoted in table 4.5 and in figures 4.3 A and 4.3 B.

Table 4.5: Age Group, Gender and Resilience

Age	Male					Female					Mean (Male)	Mean (Female)	SD Male	SD Female
20-35	59	59	60			58	58				59.33	58.00	0.577	5.66
36-55	62	63	63	64	65	59	59	60	61	62	63.4	60.20	1.14	1.30
56-75	65	65	67			61	62				65.67	61.50	1.15	0.70
Over 75						57					0	57.00		

Source: Field data

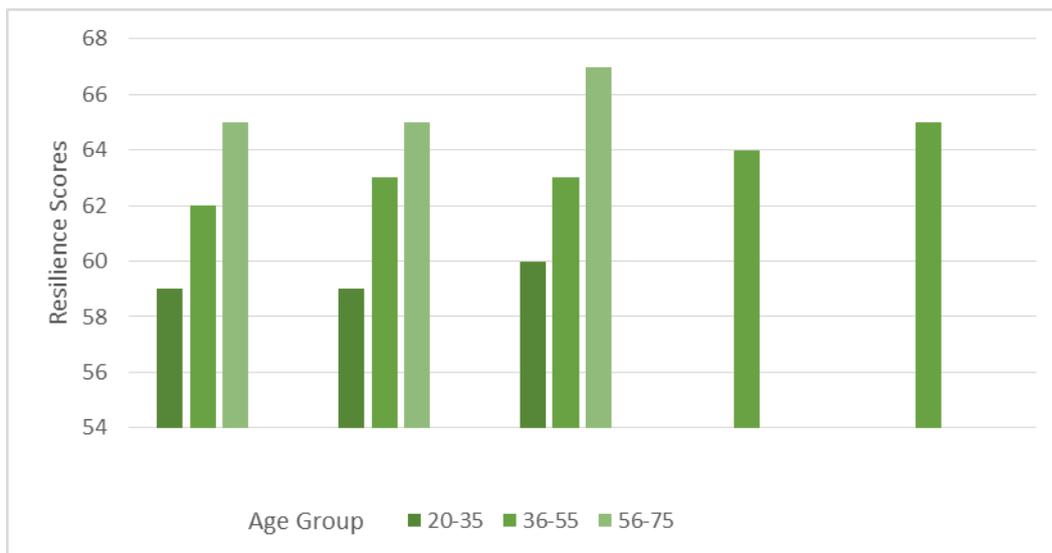


Figure 4.3 A: Male resilience levels

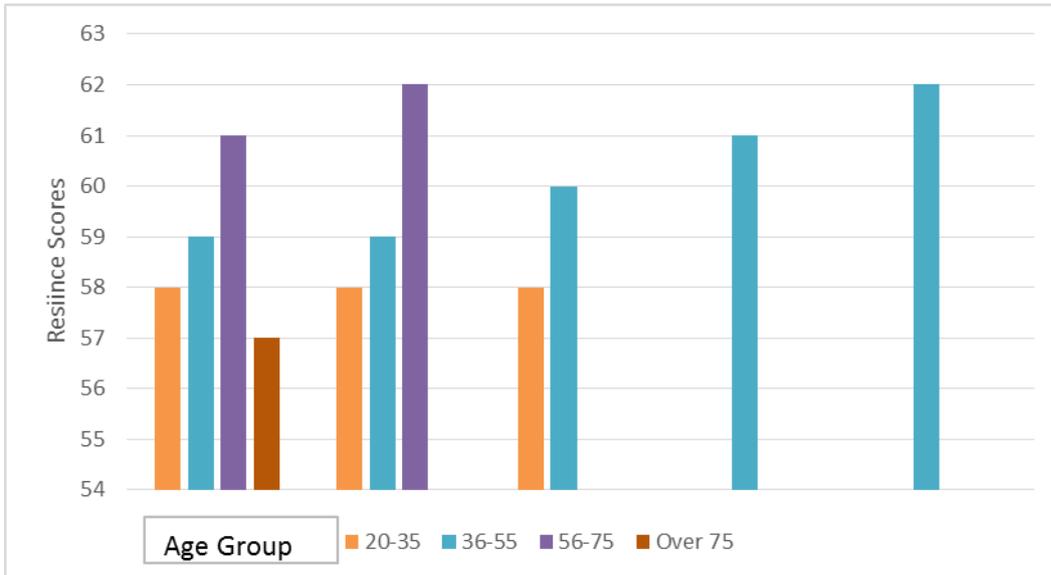


Figure 4.3 B: Female resilience levels

Mean Resilience Levels

The mean resilience levels of each age group were computed. The males of the age group of 20-35 had a mean resilience level of 59.33 while the females had 58. In age group of 36-55 the resilience levels were 63.4 and 60.2 for males and females respectively. The older respondents aged 56-75 had the highest mean resilience levels 65.67 and 61.5 for males and females respectively. One female respondent was aged over 75 years and her resilience score was 57. This information is denoted in table 4.6 and figures 4.4 A and figure 4.4 B.

Table 4.6: Resilience levels, mean and standard deviation

Age	Male					Mean (M)	Female					Mean (F)	Mean (M)	Mean (F)	SD (Male)	SD (F)
20-35	59	5	6			59.3	58	58				58	59.3	58	0.577	5.66
36-55	62	6	6	6	6	63.4	59	59	60	61	62	60.2	63.4	60.2	1.14	1.3
56-75	65	6	6			65.67	61	62				61.5	65.67	61.5	1.15	0.7
Over 75							57					57	0	57		

Source: Field data

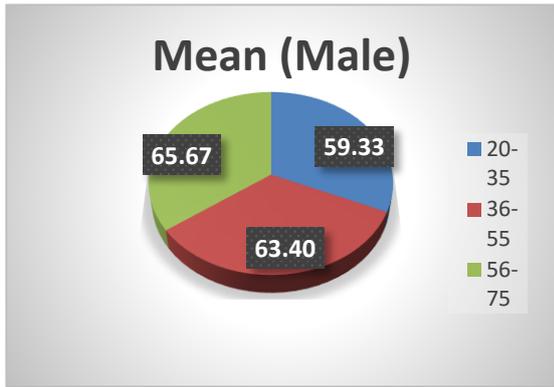


Figure 4.4 A: Male mean resilience levels

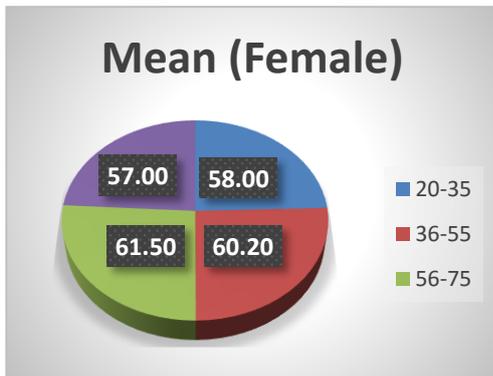


Figure 4.4 B: Female mean resilience levels

Standard Deviation

The standard deviations of each age group were also computed. The males of age of 20 -35 had a standard deviation of 0.577, the age group of 36-55 had 1.14 and the older males had 1.15. The females of age group 20-35 had a higher standard deviation of 5.66 compared to males in the same age group. The older females of age groups of 36-55 and 56-75 standard deviations values were 1.3 and 0.7 respectively. Figure 4.5 A and 4.5 B denote this information.

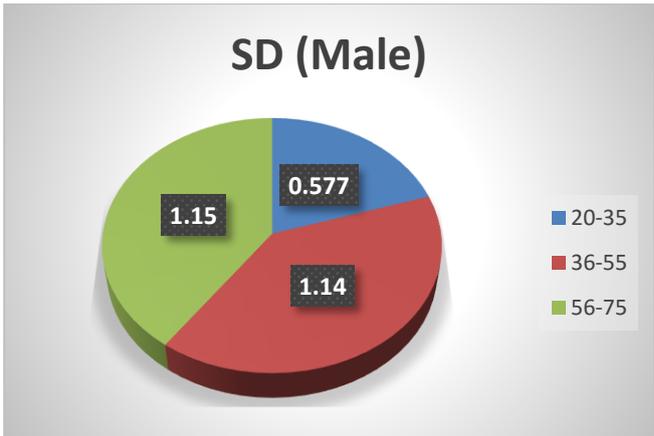


Figure 4.5 A: Male standard deviation

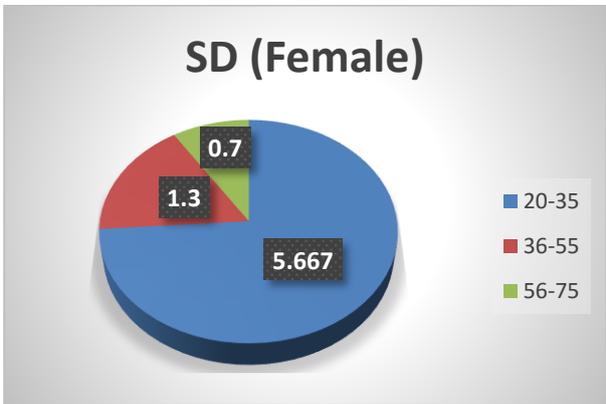


Figure 4.5 B: Female standard deviation

The values of the standard deviation are relatively small and this shows how tightly these are clustered around the mean. The values are tightly bunched together and the bell-shaped curve is steep; the standard deviation is small as opposed to when they are spread apart to make the bell curve relatively flat. There was no significant difference between the male and female respondents with respect to age but there was a significant difference between age and level of resilience whereby resilience increased with age.

4.3.2 Gender and Resilience

This study sampled 11 males and 11 females. The study assessed their resilience levels based on the psychometric items of Connor Resilience Scale 25 (CD-RISC-25) (Connor & Davidson, 2003). Score range for the 25-item scale is from 0-100 where a higher value indicates higher resilience. Respondents' responses were measured on a resilience value-rated five-point Likert scale.

Generally the majority of the respondents in the study exhibited high resilience scores, the lowest male score was 59 and the lowest female score was 57. The highest score were s 67 and 62 in males and females respectively. This is denoted in Figure 4.7 below. These results seem to suggest that males were more resilient than the females in relation to the adversity. This can be translated to mean that all the respondents developed resilience over time after traumatic fire episode. Figure 4.6 denotes this information.

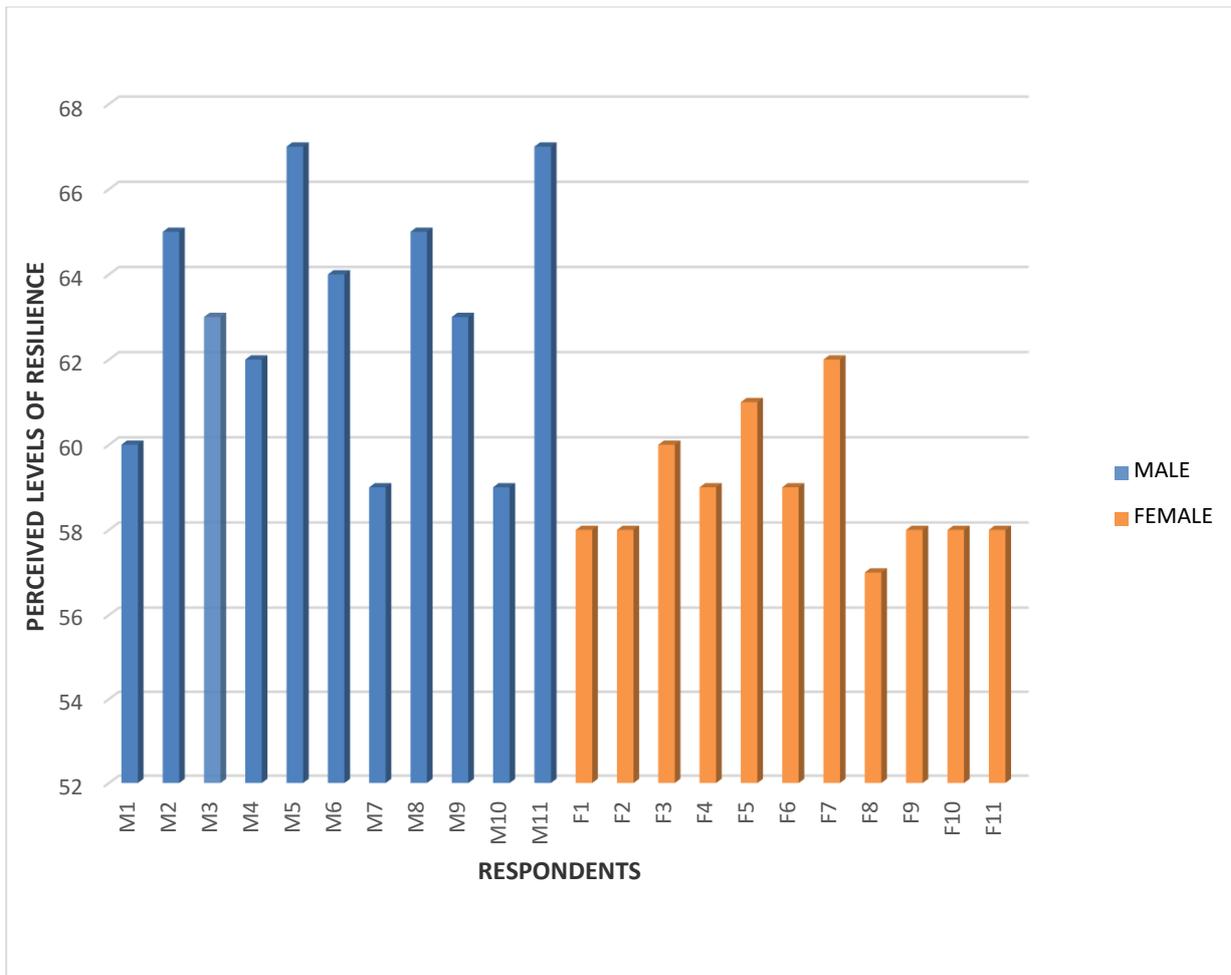


Figure 4.6: Perception levels of resilience

4.3.4 Personality and Resilience

The Big Five Inventory (BFI) personality scale (John, Donahue & Kentle, 1991; John, Naumann, & Soto, 2008) was employed in determining personality types exhibited by respondents. These personality types were then used to explain the resilience levels of respondents based on Connor-Davidson Resilience. The BFI personality scale identifies five personality types: extraversion, agreeableness, conscientiousness, neuroticism and openness. A proportion of 27.3% (6) of the respondents displayed extraversion personality traits, 22.7% (5) displayed agreeableness personality traits, 13.6% (3) displayed conscientiousness personality traits while 9.1% (2) displayed openness personality traits. This is illustrated in Figure 4.7.

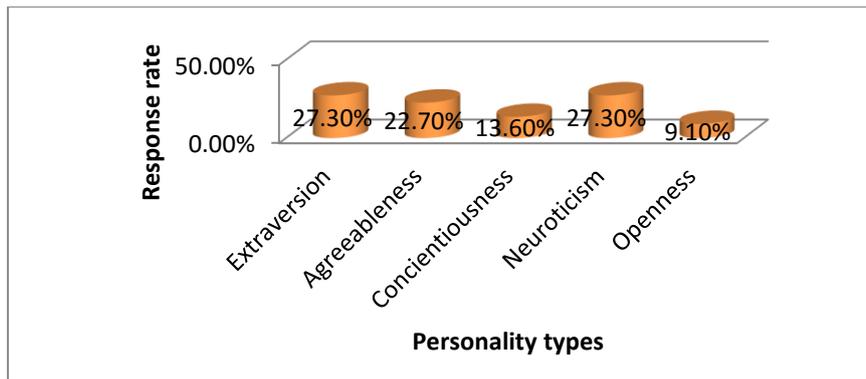


Figure 4.7: Respondents' Personality Types

Source: Field Data (2014)

The respondents who exhibited extraversion personality type recorded high resilience scores with a mean of 61.18, while those of agreeableness personality type had a low mean of resilience score 31.43. Respondents who exhibited conscientiousness personality type generally recorded very low resilience levels with a mean score of 17.92 on the resilience scale.. Respondents who exhibited neuroticism personality type generally recorded a high resilience level on the resilience scale 63.92 .Finally, respondents who displayed openness personality type 100%, (2) recorded low resilience levels on the resilience scale. Their computed mean resilience score was 27.82. These findings are summarized in Table 4.5.

The aggregate mean resilience scores for each category of personality types were also computed to establish the overall resilience levels of respondents who exhibited the various personality types. This is illustrated in Table 4.7.

Table 4.7:
Personality Types and Aggregate Mean Resilience Levels

Personality Type	Aggregate Mean Resilience Score	Resilience Level
Extraversion	62.18	Very high
Agreeableness	31.43	Low
Conscientiousness	17.92	Very low
Neuroticism	63.92	High
Openness	27.82	Low

Source: Field Data (2014)

The study sought to establish the variations in personality traits among respondents of varying ages and gender. Majority 50% (4) of respondents aged between 20-35 years exhibited agreeableness personality traits. A greater proportion of the respondents aged between 36-55 years exhibited extraversion 30%; (3) and neuroticism 50% (5) personality traits. Respondents aged between 56-75 years majorly 75%(3) exhibited extraversion personality traits. A summary of this finding is presented in Table 4.8.

Table 4.8:

Age and Personality Types

Age (Yrs)	Personality Type (%)					Total (%)
	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness to experience	
20-35	0.0 (0)	50.0 (4)	37.5 (3)	12.5 (1)	0.0 (0)	100(8)
36-55	30.0 (3)	10.0 (1)	0.0 (0)	50.0 (5)	10.0 (1)	100(10)
56-75	75.0 (3)	0.0 (0)	0.0 (0)	0.0 (0)	25.0 (1)	100(4)
Total	6	5	3	6	2	100 (22)

Source: Field Data (2014)

More male than female respondents exhibited extraversion and neuroticism personality traits. Majority of female respondents exhibited agreeableness and conscientiousness personality traits as illustrated in Table 4.9.

Table 4.9:***Gender and Personality Types***

Gender	Personality Type					Total (%)
	Extraversio n	Agreeableness	Conscientiousness	Neuroticism	Openness to experience	
Male	36.4 (4)	18.2 (2)	0.0 (0)	36.4 (4)	9.0 (1)	100(11)
Female	18.2 (2)	27.3 (3)	27.3 (3)	18.2 (2)	9.0 (1)	100(11)
Total	6	5	3	6	2	22

Source: Field Data (2014)

The aggregate mean resilience scores for each category of personality types were also computed to establish the overall resilience levels of respondents who exhibited the various personality types. This is illustrated in Table 4.10.

Table 4.10:***Personality Types and Aggregate Mean Resilience Levels***

Personality Type	Aggregate Mean Resilience Score (%)	Resilience Level
Extraversion	82.18	Very high
Agreeableness	31.43	Low
Conscientiousness	17.92	Very low
Neuroticism	72.92	High
Openness to experience	27.82	Low

Source: Field Data (2014)

4.4 EXTERNAL FACTORS THAT INFLUENCED RESILIENCE AMONG VICTIMS OF THE FIRE TRAGEDY IN KIAMBAA

The study identified two main external factors that influenced resilience levels among the respondents of this study. However, these factors varied considerably across age and gender of the respondents.

4.4.1 Spirituality and Resilience

The study sought to find out the extent to which spirituality influenced resilience levels among victims of the fire tragedy at Kiambaa. The responses were tested using a five-point Likert scale. Respondents' spirituality levels were measured basing on their tendency to either incline towards a supernatural being (God) or not. Respondents were asked to indicate the extent to which they enjoyed talking spiritual matters with their family members and friends.

A proportion of 13.6% (3) of the respondents strongly agreed with this statement, 68.2% (15) agreed, 13.6% (3) disagreed while 4.5% (1) strongly disagreed. It was clear that a bigger proportion of the respondents embraced spiritual matters by sharing with their family members and friends.

Respondents were asked whether they enjoyed sharing with others the problems and joys of living according to their spiritual beliefs. A proportion of 9.1% (2) strongly agreed, 77.3% (17) agreed, 9.1% (2) were undecided. None of the respondents strongly disagreed with this statement.

A proportion of 9.1% (2) of the respondents indicated that they enjoyed reading the Bible/Koran and other spiritual material. A proportion of 68.2% (15) agreed with this statement, 13.6% (3) were not sure of their position while 9.1% (2) disagreed.

When asked whether they engaged in private prayer and meditation, 27.3% (6) strongly agreed, 68.2% (15) agreed and 4.5% (1) disagreed. None of the respondents was undecided or strongly disagreed.

Respondents were asked to indicate whether forgiveness was an important part of their spirituality. A proportion of 9.1% (2) of the respondents strongly agreed, 4.9% (9) agreed and

another proportion of 4.9% (9) of the respondents were undecided. Those who disagreed and strongly disagreed each accounted for 4.5% of the sample of respondents.

The study also sought to find out if the respondents sought spiritual guidance in making decisions in their everyday life. A proportion of 4.5% (1) strongly agreed, 63.6% (14) agreed, 22.7% (5) were undecided about their stand on this statement while those who disagreed and strongly disagreed each accounted for 4.5% of the sample.

When asked to indicate whether spirituality was a significant part of their lives, 3.6% (3) strongly agreed, 68.2% (15) agreed, 13.6% (3) disagreed while 4.5% (1) strongly disagreed.

Figure 4.8 illustrates these findings.

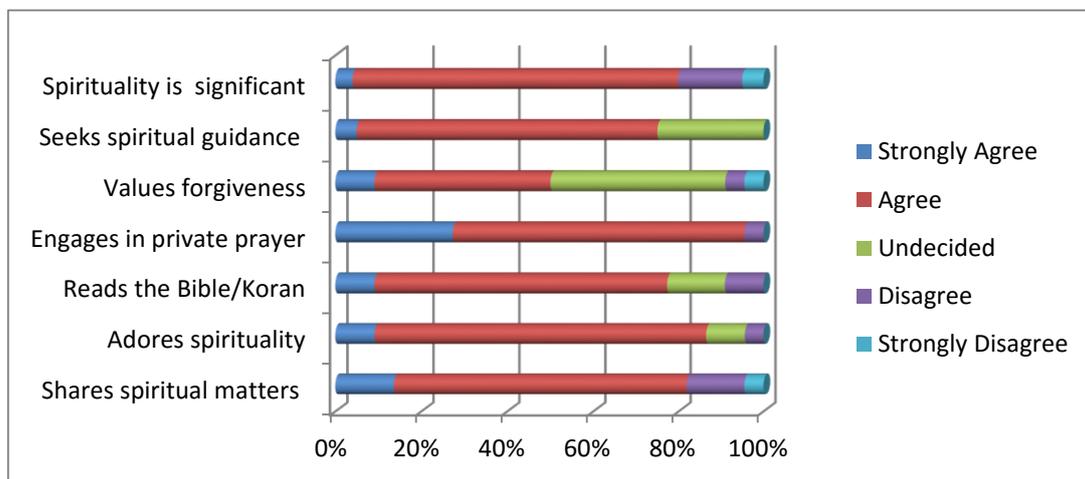


Figure 4.8: Extent to which Respondents Engage in Spiritual Matters

Source: Field Data (2014)

During the interviews with respondents, a majority of them indicated how they valued their spiritual inclinations. The respondents indicated as follows:

Were it not for my spiritual inclinations, I would not have forgiven my perpetrators....ooh...I meditate a lot...I pray that God forgives them... (Respondent 1; RO11).

Another respondent pointed out that:

The loss of my wife and child has stopped troubling me...my closeness to God through prayers and meditation has made me this forgiving

character. I don't know what I would have done if I were not close to the church... (Respondent 9; R09).

When respondents were asked whether their spiritual views had an influence upon their lives during the time of adversity, 9.1% (2) of the respondents strongly agreed, 63.6% (14) agreed, while 13.6% (3) were undecided. Those who disagreed with this statement accounted for 13.6% (3) of the sample. None of the respondents strongly disagreed.

A proportion of 27.3% (6) of the respondents indicated that their involvement in spiritual activities in their respective churches and the community had been a source of inspiration to them. A proportion of 68.2% (15) agreed with this statement, while only 4.5% (1) of the respondents were undecided.

A respondent was quoted as saying:

...let people get themselves busy in church activities...I would have harboured a heavy grudge against the people who caused me pain...my being active in church helped access a lot of help from my church (catholic). Now am okay...I forgave everyone...they didn't know what they were doing...

When asked whether support from their spiritual leaders had been significant to them at the time of trauma, 9.1% (2) of the respondents strongly agreed, 40.9% (9) agreed, another 40.9% (9) were undecided while 9.1% (2) disagreed. These findings are presented in Figure 4.9.

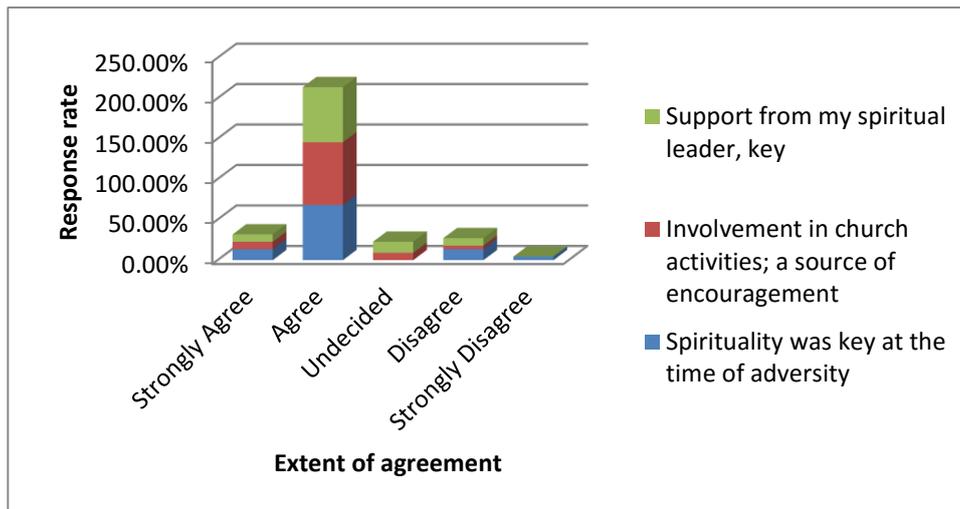


Figure 4.9: Extent to which Respondents Engage in Spiritual Matters
Source: Field Data (2014)

4.4.1.1 Gender, Spirituality and Resilience Levels

A greater proportion (63.6% (7) of the female respondents were highly inclined towards spiritual matters, 27.3% (3) were moderately inclined to spiritual matters while 9.1% (1) was lowly inclined towards spiritual matters. Female respondents who were highly inclined towards spiritual matters recorded a mean resilience score of 80.11%. Those who were moderately inclined towards spiritual matters recorded a mean resilience score of 59.27% while the respondent who were lowly inclined towards spiritual matters recorded a resilience score of 23.13%

A proportion of 36.4% (4) of male respondents were highly inclined towards spiritual matters with a calculated mean resilience score of 81.21%. A proportion of 27.3% (3) of the male respondents were moderately inclined towards spiritual matters and recorded a calculated mean resilience score of 60.31% while 36.3% (4) were lowly inclined towards spiritual matters. Their mean calculated resilience score was 32.99%. Respondents who were highly inclined towards spiritual matters generally recorded a higher mean resilience score as compared to those who were moderately and lowly inclined towards spiritual matters. These findings are illustrated in Table 4.11.

Table 4.11***Gender, Spirituality and Resilience Levels***

Gender	Response Rate	Level of Inclination to Spirituality	Mean Resilience Score (%)
Female	63.6%	High	80.11
	27.3%	Moderate	59.27
	9.1%	Low	23.13
Male	36.4%	High	81.21
	27.3%	Moderate	60.31
	36.3%	Low	32.99

Source: Field Data (2014)

4.4.1.2 Age, Spirituality and Resilience Levels

The level of inclination to spirituality varied across respondents of different ages. Their resilience levels varied considerably as well. A proportion of 37.5% (3) of the respondents in the age group of 20-35 years showed moderate inclination towards spirituality issues while 62.5% (5) were lowly inclined towards spirituality. Respondents in this cohort recorded a mean resilience score of 31.79%. A proportion of 30% (3) of the respondents in the age bracket of 36-55 years were highly inclined towards spirituality issues, 50% (5) were moderate while 20% (2) were lowly inclined towards spirituality issues. The mean resilience score for respondents in this age bracket was 63.81%.

A proportion of 25% (1) of respondents aged between 36 and 55 years were moderately inclined towards spirituality while the majority of them 75% (3) were highly inclined towards spirituality. The mean resilience score was 77.31%. These findings indicate that generally younger respondents were lowly inclined to spirituality as compared to the older respondents.

Besides, younger respondents recorded a low resilience level as compared to the older respondents who recorded a high resilience level. Table 4.12 presents these findings.

Table 4.12:

Age, Spirituality and Resilience Levels

Age bracket	Response Rate	Level of Inclination to Spirituality	Mean Resilience Score (%)
20-35 years	0.0	High	31.79
	37.5	Moderate	
	62.5	Low	
36-55 years	30.0	High	63.81
	50.0	Moderate	
	20.0	Low	
56-75 years	75.0	High	77.31
	25.0	Moderate	
	0.0	Low	

Source: Field Data (2014)

4.4.2 Forms of Social Support

The study sought to establish the various forms of social support that the respondents received during the post-election violence period. This later formed a basis for correlating social support and resilience exhibited by respondents. Majority of respondents 86.4%(19) indicated that they received overwhelming support from the Kenya Red Cross Society (KRCS) during the post-election violence incidence. The KRCS was appointed by the government as the lead coordinating agency for response to the emergency arising from the post election violence. A female respondent indicated that:

KRCS organized psychosocial interventions to support victims of the post-election violence, especially IDPs, in coping with the trauma. Activities centered on psychological support, First Aid, group debriefing sessions, referrals for specialized care or treatment and support in accessing basic needs. Outreach programs were also conducted in institutions of learning and Orphans and Vulnerable Children centers that hosted displaced children (Female Respondent 4).

KRCS, in collaboration with other stakeholders such as the UN Population Fund, UN Refugee Agency, the government of Kenya, and Liverpool VCT (a Kenyan HIV care and treatment NGO), conducted training sessions in designated areas (among them Kisii, Kisumu, Eldoret, Nakuru and Nairobi), to build the local capacity in addressing gender-based violence issues in internally displaced persons (IDP) camps.

Those who indicated that they received social support from the International Organization for Migration (IOM), accounted for a proportion of 22.7% (5). The study found out that the IOM, in collaboration with the Ministry of Health's Department of Mental Health, and other agencies, provided psychosocial support to the IDPs.

A proportion of 40% (9) of the respondents indicated that they received social support from UNICEF while 19 (86.4%) received social support from the church during the post election violence incidence. The study found out that UNICEF, in collaboration with Trans-Cultural Psycho-Social Organization, KRCS, and a number of nongovernmental and community-based organizations, created a program to ensure provision of community-based psychosocial support, through training of community-based service providers, including teachers (in cooperation with education). Those respondents who indicated that they received social support from social workers and community members were 5 (22.7%) and 6 (27.3%) respectively. Finally, a proportion of 45.5% (10) of the respondents indicated that they received social support from professional counselors as indicated in Table 4.13.

Table 4.13:***Forms of Social support***

Social Support Provider	Frequency	%
Families	4	18.2
Friends	5	22.7
Church	19	86.4
KRCS	19	86.4
IOM	5	22.7
UNICEF	9	40.9
Social workers	5	22.7
Community members	6	27.3
Professional counselors	10	45.5

Respondents were asked to indicate on a rank of a five-point Likert scale whether they received social support during the time of adversity or otherwise 13.6% (3) indicated that they relied on themselves and, therefore, did not receive social support during the time of adversity. Furthermore, 18.2% (4) indicated that their families listened to their problems during the trauma period and never judged or criticized them while 22.7 % (5) indicated that their friends in the community were always part of their everyday activities at the time of adversity. The study sought to establish the extent to which social support was significant in helping those respondents who received it to bounce back to normalcy after the time of adversity. A proportion of 77.3 (17) indicated that the social support they received during the time of adversity significantly helped them to bounce back to normalcy. The remaining proportion of 9.1% (2) of the respondents indicated that they were suspicious of the social support they received and hence indicated that that support did not significantly help them to bounce back after the pain they experienced.

In order to establish the relationship between social support and resilience, a Pearson product moment correlation analysis was computed. The results obtained showed the existence of a

positive and significant relationship between social support and resilience levels of individuals. Table 4.14 shows the tabulated results from the computation.

Table 4.14:

Pearson Correlation Analysis Results

		Resilience
Social support	correlation coefficient	.835**
	Sig. (2-tailed)	.007
	N	22

** Correlation is significant at the 0.05 level (2-tailed).

The results indicated that, the calculated p-value for all the predictor variable was less than the significant p-value (0.05). Further, the results confirmed a strong positive correlation between social support and resilience of individuals ($r=0.835$, $p<0.05$).

The study further established that resilience levels among respondents who received social support and acknowledged its significance in helping them bounce back to normalcy, varied between individuals of different age and gender. Tables 4.15 and 4.16 present these findings.

Table 4.15:

Gender, Social Support and Resilience

Gender	Response Rate (%)	Social Support	Mean Resilience Score (%)
Female	45.5	Received	82.11
	4.5	Did not receive	17.89
Male	40.9	Received	85.37
	9.1	Did not receive	14.63

N = 22

The results indicated that male respondents who received social support were more resilient than the female respondents. However, respondents who received social support during the time of adversity scored highly on the resilience scale than those who did not.

Table 4.16:

Age, Social Support and Resilience

Age Bracket	Response Rate (%)	Social Support	Mean Resilience Score (%)
20-35 years	36.4	Received	65.79
	0.0	Did not receive	0.0
36-55 years	36.4	Received	79.81
	9.1	Did not receive	31.56
56-75 years	13.6	Received	77.31
	4.5	Did not receive	36.45

N = 22

Generally, respondents who did not receive social support recorded lower mean resilience scores than those who received. However, respondents who received social support in the older age brackets recorded higher resilience level than those in the younger age brackets.

4.5 SIGNIFICANT INTERNAL AND EXTERNAL FACTORS THAT CONTRIBUTE TO RESILIENCE IN MALE AND FEMALE VICTIMS

A spearman’s rank correlation coefficient was computed to establish the relationship between internal and external factors of male and female respondents and their resilience levels. Table 4.17 presents the results of the analysis.

Table 4.17:***Spearman's rank correlation coefficient***

		Resilience
Age	Correlation Coefficient	.609**
	Sig. (2-tailed)	.000
	N	22
Gender	Correlation Coefficient	.831**
	Sig. (2-tailed)	.000
	N	22
Personality	Correlation Coefficient	.688**
	Sig. (2-tailed)	.000
	N	22
Spirituality	Correlation coefficient	.835**
	Sig. (2-tailed)	.000
	N	22
Social support	Correlation coefficient	.735**
	Sig. (2-tailed)	.000
	N	22

** Correlation is significant at the 0.01 level (2-tailed).

The results indicated that the calculated p-value (0.001) for all the five predictors (age, gender, personality, spirituality and social support) was less than the hypothesized p-value (0.01). Further, the results confirmed a strong positive correlation for all the five variables tested at one percentage significance level with spirituality having the highest $r = 0.835$, followed by gender $r = 0.831$ then social support $r = 0.735$ then personality $r = 0.688$ and age $r = 0.609$ with $p < 0.01$). Age, gender, personality, spirituality and social support, therefore, significantly contribute to resilience of individuals who experienced adversity in their lives.

4.6 CHAPTER SUMMARY

This chapter has highlighted data analysis procedures including demographic data and internal factors influencing resilience among victims of a fire tragedy in Kiambaa. The internal factors analyzed are: age and resilience, gender and resilience, and personality traits and resilience. It also addresses external factors that influence resilience among the respondents. Spirituality and resilience, and social support and resilience are the external factors explained. Significant internal and external factors that were associated to resilience in male and female respondents were also discussed.

The mean resilience level for the males was computed and found to be 63.11. This was interpreted to mean that the male respondents in the sample displayed a high resilience level (HRL). Majority of respondents aged 36-55 displayed higher resilience than respondents aged between 20-35 as measured on the resilience manual scale. Respondents in the age bracket of 36-55 years indicated that they easily coped under pressure; were not easily discouraged by failure and were in a position to handle painful feelings. The mean resilience level for the males was computed and found to be 63.11 This was interpreted to mean that the male respondents in the sample displayed a high resilience level (HRL). A majority, 5 (75%, of the respondents aged between 36 and (3) were highly inclined towards spirituality.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 CHAPTER OVERVIEW

This chapter presents the discussions, conclusion and recommendations derived from the findings of the study. The conclusions and recommendations are presented in an attempt to provide a critical evaluation of the study and also indicate how it contributes to psychological knowledge particularly in the areas of resilience after trauma within the field of positive psychology. This study aimed at assessing the factors that contribute to resilience after trauma among survivors of a fire tragedy.

5.2 DISCUSSIONS

The aim of the present study was to investigate psychological resilience in the survivors of the 2008 fire tragedy in Kiambaa Village, Eldoret District, Uasin Gishu County, Kenya. A mixed-methods design was employed to achieve this aim; the two phases of the study; the qualitative and the quantitative phases, were conducted to be able to gain a complete understanding of psychological resilience and to ensure comprehensiveness of the study findings. The purpose of the qualitative study was to understand perceptions of psychological resilience in a sample of survivors of the 2008 fire tragedy in Kiambaa Village and to formulate a revised model for the quantitative phase by adding possible potential variables uncovered in the qualitative phase. On the other hand, the quantitative study aimed to identify factors associated with psychological resilience. The findings from both phases of the study were discussed in the chapters devoted to the presentation of the results in the qualitative and quantitative phases.

This section describes the interpretations and opinions of the respondents and explains the implications of the findings. Its main aim is to answer the research questions posed and explain how the results support the answers and how the answers fit in with the objectives of the study.

The following were the objectives of the study:

1. To establish internal factors that influenced resilience among victims of the fire tragedy in Kiambaa village in Eldoret East District of Uasin Gishu County.
2. To establish external factors that influenced resilience among victims of the fire tragedy in Kiambaa village in Eldoret East District of Uasin Gishu County.
3. To find out the relationship between resilience and internal and external factors of internally displaced persons after experience of trauma.

5.2.1 Internal Factors that Influenced Resilience among Victims of the Fire Tragedy in Kiambaa Village in Eldoret East Sub-County of Uasin Gishu County

5.2.1.1 Age as a Factor that Contributes to Resilience

Based on the findings, older respondents (56 – 77 years) in this sample were associated with higher resilience levels which are similar to other findings reported in aging literature (Gooding *et al.*, 2012). These findings could be explained by the indications that the older adults had experienced other similar forms of traumatic events before and had developed better coping abilities that could help them in adverse life changing situations. This was evident particularly among the respondents who indicated that they had experienced adversity which had disrupted their lives in the past years. Such exposure to adversities had enabled them to develop coping strategies and was useful in the fire tragedy adversity.

High resilience levels with greater age may also reflect a higher ability to adjust to adverse life changes which leads to acceptance and better adjustment, similar to what Richardson (2002) theorize as positive re-integration. The respondents in this study experienced loss of life and property after the fire tragedy but developed some motivation to withstand the adversity. The middle/younger (35-55 years) respondents scored moderately in the resilience levels (56.23%). It may be interpreted that at these age times, individuals are faced with

greater demands with regard to work, familial roles and other responsibilities which made them more overwhelmed during the adversity. Richardson (2002) posited that such individuals may have given up some motivation, hope or drive and recovered with loss because they were prompted by the demands of life. This may also suggest that resilience may also be related to lifespan challenges and experiences one is going through at a particular stage of their life. This notion is derived from developmental theories which describe resilience as a developmental process that changes in cognition, emotion and social environment (Erickson, 1950).

The respondents of the youngest age group (20-35 years) had the lowest mean in the resilience levels (24.56). This may be attributed to the realities that this young people were exposed to risks that affected the processes of developing resilience. Due to the displacement from their homes, the respondents were forced to live in make shift camps where the conditions were deplorable and insecure. The “playing field” was not level for these young people, particularly considering the hostilities they faced during the time of the conflicts. They faced discrimination, stigma, poverty and environmental stress related to the conflicts and displacement from their homes. These individuals also lacked older adult support and encouragement and were more vulnerable to other negative coping strategies such as anger, distrust, bitterness and drug abuse. Richardson (2002) termed such individuals as those who have re-integrated negatively. It is evident that the older the age the more the resilience even when one is under pressure. One is not also not easily discouraged by failure and one is in a position to handle painful feelings as well.

5.2.1.2 Gender and Resilience

These findings are in tandem with findings of previous research (Mann, Hosman, Schaalma, & de Vries, 2004). This shows that gender differences in resilience factors are guided by the

notion that men and women have different personality trait that influence the way they cope with adversity. For instance, men tend to communicate less during the time of adversity and they end up getting less help and empathy as compared to women who communicate more and earn empathy and other types of support (Sun & Stewart, 2007). Women tend to utilize familial and community protective factors, while men depend more on individual protective factors.

5.3 PERSONALITY AS A RESILIENCE FACTOR

5.3.1 Big Five Personality Traits and Resilience

5.3.1.1 Extraversion

In this study, there is considerable evidence that personality traits influenced resilience among the respondents. In the Big Five personality inventory, extraverted individuals recorded the highest mean resilience levels. This was similar to other studies reviewed in the literature in which resilience was positively related to extraversion and this reflects that these individuals had positive emotional coping style, strong social interaction and activity and capacity for interpersonal closeness (Campbell-Sills, Cohan & Stein, 2006). In terms of gender, more males than females were of extraversion personality type and recorded high resilience levels. These individuals were of older age groups (35-55, 56-75). This means that these individuals were more capable of developing strong social interaction and had a higher capacity for interpersonal closeness. The new findings based on the results in the study is that male respondents of older age exhibited extraversion personality type more than females and they also recorder high levels of resilience. Extraversion personality and age were significant factors that contributed to high resilience levels in males more than females.

5.3.1.2 Conscientiousness

Individuals of conscientious personality type exhibit high levels of thoughtfulness, good impulse control and are usually goal oriented, organized and mindful to others. The

individuals in the study with conscientiousness personality styles scored very low resilience levels. Conscientious personality type was not of significance among the males in this study; however the younger females exhibited this type of personality. The researcher suggests that the negative relationship between resilience and conscientiousness shows that these individuals may not have developed coping strategies that would have assisted them to cope with the trauma after the adversity. The determined approach of conscientiousness is usually associated with the style of coping. The results therefore indicate that the individuals in this study were not equipped with active problem solving approaches that would have assisted in promoting resilience after the trauma.

5.3.1.3 Neurotism

Surprisingly, individuals with neurotic personality had high mean resilience levels contrary to previous empirical studies reviewed in the literature (Annalakshmi, 2007). Neurotic personalities have generally been associated with poor coping skills, difficult in controlling impulses and the tendency to experience negative emotions. People with low neuroticism are generally considered well adjusted. Neurotic individuals tend to be anxious and never plan for the future. The high resilience levels the neurotic the individuals in this study scored may have resulted from intensive spiritual care and social support they received after the adversity. Similar to what was theorized by Joseph and Linley (2005) which showed that traumatized individuals' valuing process can lead to actualization of positive or negative accommodation of the new trauma related information which is provided by the social environment. This may have led to greater psychological well-being that enabled the neurotic individuals to integrate to the new assumptive world after the trauma.

The possible suggestion by the researcher is that the social environment particularly the social support from the spiritual groups, health care professionals, counselors and the

financial support they received from the government and other agencies empowered the individuals' psychological and physical needs which may have promoted their resilience after the trauma.

5.3.1.4 Agreeableness

Agreeableness personality types exhibited relatively low mean resilience in the BFI scale. Individuals with agreeableness personality type are associated with pleasant and more accommodating characteristics and adjust well in social situations. They tend to think that most people are honest, decent and trustworthy and likely to suffer from social rejection (Bierman, 2003). In this study the low resilience scores may have resulted from the broken fabrics of trust that resulted in conflicts and the consequent fire tragedy. These individuals had lived together as neighbours and friends and were well adjusted socially among themselves but the conflicts and the tragedy resulted in pain, mistrust and social rejection.

5.3.1.5 Openness to Experience

The study showed that the mean resilience levels of individuals of openness to experience personality type were relatively low. Previous research (Fayambo, 2010) demonstrated that individuals of this personality type are characterized with traits such as having wide interests, being imaginative, insightful, attentiveness to inner feelings, preference for a variety and intellectual curiosity. Researchers have generally demonstrated that these individuals tend to be politically liberal and tolerant to diversity and are more open to different cultures and lifestyles (McCrae, 1996; Jost, 2006). This personality type was evident in males and females who belonged to the older age group (56-75). It may be translated that individuals in this study were not able to adjust appropriately with the new situations after the trauma and thus reflecting low resilience levels.

5.4 EXTERNAL FACTORS THAT INFLUENCED RESILIENCE AMONG VICTIMS OF THE FIRE TRAGEDY IN KIAMBAA VILLAGE IN ELDORET EAST DISTRICT OF UASIN GISHU COUNTY

5.4.1 Spirituality and Resilience

The study found out that spirituality was a significant part in the lives of the individuals and most of the respondents indicated that they benefited from their spiritual inclinations and the support from spiritual leaders. A large proportion of the respondents also indicated that they adored spirituality and shared spiritual matters with others. Similar studies found that in stressful situations people seek support from religious professionals, friends and also read religious literature (Schuster *et al.*, 2007).

Both males and females were inclined to spirituality although females recorded higher levels. Age was another factor that determined the resilience levels of the individuals. The young adults (20-35) were less inclined to spirituality. This may suggest that spiritual beliefs of the young adults were not of significant importance in their lives. They may have been more preoccupied with factors negative to spirituality such as anger, bitterness, and revenge and were more vulnerable to negative behaviours such as substance abuse. These individuals may have experienced negative re-integration and accommodation with negative changes as theorized by Richardson (2002) and Joseph and Linley (2005). These young adults scored low levels resilience as compared to the older adults.

On the other hand the older adults (ages 36 -75) were more inclined to spiritual beliefs. This may suggest that spirituality was an important aspect that helped these individuals cope with the traumatic situations they faced after the fire tragedy. The respondents indicated that spirituality gave them purpose, hope, motivation and meaning to the suffering they were facing after the adversity.

They also indicated that they felt comforted and reassured of God's love and care and they adapted the spiritual concept of active surrendering (doing what they could and putting the rest in God's hands). The individuals were more inclined to prayer and they believed that through their prayers God provided a new positive reason that helped them to move on and cope with the adversities they faced. Previous studies reviewed in the literature indicated that traumatized individuals utilized their spiritual resources and beliefs which assisted them to sublimate to higher levels of self-consciousness which enable them to solve life problems and also practice virtuous deeds such as forgiveness (Pargament *et al.*, 2004; Julio, Moreira-Almeida, Nasello, & Koenig, 2008). The researcher is of the view that spirituality in relation to age is an important factor that contributed to resilience among the respondents. Based on the findings the researcher suggests that spirituality contributes to an individual's wellbeing after adversity and it is an important factor to be used to encouragement of traumatized individuals.

5.4.2 Social support and Resilience

A majority of the respondents, 89.5% (17) agreed that they received social support from the community during the time of adversity or otherwise. The results confirmed a strong positive correlation between social support and resilience of individuals. There is evidence that the individuals in the current study received considerable social support and acknowledged its significance in helping them bounce back to normalcy. The researcher is of the opinion that the social support the individuals received involved emotional aiding (psychological debriefing), relevant information given, problems solving, health care provided and material support provided such as food, clothes and shelter. Similar concepts were coined by Cassel (1976) and Cobb (1976). In their model, named the functional model, they suggested that social support is meant to fulfil an overt and implicit need that if not met well will lead to

distress and if successfully met will lead to amelioration. Functional support was, therefore, significant in boosting the resilience levels of the individuals in the current study.

A large proportion of the individuals in the study (86.4%) received structural support which was mainly provided by the Kenya Red Cross Society (KRCS) and the church. These organizations facilitated access to material resources such as food, clothing and shelter, and also financial, educational and medical assistance. Similar findings were found in other studies reviewed in the literature which showed that strong and satisfying relationships with the social environment during extreme stress increases an individual's confidence and coping ability (McAllister & McKinnon, 2009; Chang & Taormina, 2011). The respondents also indicated that they received emotional support from counselor, social workers and other professionals. This type of support was instrumental in helping out with the immediate tasks of daily living and also in decision making. Similar to other studies by Kaniasty & Norris, (2009) who found the positive social support is instrumental in providing emotional reassurance.

The social support the respondents received from family and friends was relatively insignificant contrary to other studies reviewed in the literature which showed that social support from family and friend was highly significant (Dollete, Steese, & Mathews, 2006). The research is of the opinion that during the traumatic episode the families and their friends were equally devastated and overwhelmed by the crisis event and were not able to offer each other adequate support. They were equally KRCS, IOM, church and other community member.

This support varied between individuals of different ages and gender. Male respondents who received social support were more resilient than the female respondents, although the difference in the percentages may not be highly significant (85.37% and 82.11% for males

and females respectively). These findings are contrary to previous findings reviewed in the literature that females utilize more social support than males (Friborg *et al.*, 2003). Both males and females in the study were involved in nurturing friendships and seeking professional help from professionals such as counselors and resilient peers who acted as role models and assisted them to cope with the adversity. This is similar to what was conceptualized by Ballenger-Browning and Johnson (2010) that individuals who develop nurturing friendships, seek resilient role models and are able to learn from them and thus cope with adversity effectively.

The respondents of the older age brackets recorded higher resilience levels than those in the younger age brackets, while respondents who did not receive social support recorded lower mean resilience scores than those who received. The high levels of resilience indicate that such individuals who received social support networked and interacted frequently with family members, friends, counsellors and other professionals. Ungar *et al.* (2007) referred to this as positive social support that enables one to feel confident and helps in boosting one's ability to deal with adversity. In the current study, social support was beneficial to the individuals because it made them feel confident and thus tackle the adversities they were facing at the time of the fire tragedy. It seems social support was associated with increased hope and better coping, thereby making the individuals more inclined to resilience than receiving support. Social support in the current study had a significant positive relationship with the resilience of the individuals. Age, gender, personality, spirituality and social support, therefore, significantly contributed to the resilience of individuals who experienced adversity in their lives.

5.5 RELATIONSHIP BETWEEN RESILIENCE AND INTERNAL AND EXTERNAL FACTORS OF INTERNALLY DISPLACED PERSONS AFTER THE EXPERIENCE OF TRAUMA

The findings from both phases of the present study also show that psychological resilience is a multi factorial construct and provides theoretical support for resilience models which suggest a multi factorial structure for the concept (Machida et al., 2013). Findings from both the qualitative and the quantitative phases of the study showed that the internal and external factors affect resilience of the survivors of the Kiambaa fire tragedy. These findings in this study support the multi factorial nature of psychological resilience and suggest that the internal and external factors should be considered as important when addressing resilience. This lends further support to the view that in order to understand resilience comprehensively; a multi factorial model is necessary which includes trait factors and mechanisms translating these factors into effective adaptation (Benight & Cieslak, 2011). Development and empirical validation of multi factorial models specific to the fire disaster context would further contribute to the disaster field and the resilience research. Furthermore, it is also necessary to use multiple measures of psychological resilience to gain a complete understanding of resilience, as also advocated by Bonanno (2012).

5.6 CONCLUSIONS

The study established that the main internal factors that contributed to resilience in individuals were age, gender and personality. However, gender had a greater influence on individuals' resilience levels followed by personality and then age of respondents. The main external factors that contributed to resilience in individuals of the fire tragedy at Kiambaa were spirituality and social support. This suggests that psychological resilience is influenced by a multitude of variables and any resilience, or risk, assessment in fire disaster contexts should include multivariate factors in order to gain a complete understanding of the concept at hand. In sum, these findings may shed light on future studies focusing on resilience facilitating factors, and have theoretical and practical implications.

5.7 RECOMMENDATIONS

Based on the findings of this study the researcher recommends the following that:

There is need for professionals, specifically health professionals, such as nurses, social workers, psychologists and religious/spiritual leaders working with individuals who are traumatized after adversities to pay more attention to the factors that contribute to resilience. The results suggested that age, gender, personality, spirituality and social support were important resilience factors that boosted the recovery of the individuals in the study. The researcher therefore recommends that there is need to strengthen these factors in intervention strategies of individuals facing extreme stress after adversities to enable them to overcome the traumatic situations.

The researcher also recommends that there is need to extend the present study by including other potentially important variables such as a wider range of psychosocial resources or health-related variables. Understanding the influence and importance of these variables may help to clarify the role of resilience in post-disaster adaptation.

In addition, the researcher recommends that there is need to further extend the study to investigate the relationship between psychological resilience and another positive outcome, such as posttraumatic growth (PTG). This is important because through identifying differences and similarities between such concepts, the scope and the content of the resilience concept would be understood better. In addition, a variety of benefits may occur following traumatic events, some of which would not be related to positive changes such as PTG (Vishnevsky et al., 2010). For example, one might perceive benefits from experiencing a politically propelled fire disaster such as financial compensation, but may not experience an enduring positive change such as personal growth. Therefore, understanding how resilience is distinguished from benefit-finding would also

provide meaningful information about how to conceptualize resilience and whether such benefits should be inherent in resilience or not.

5.8 LIMITATIONS OF THE STUDY

The study was designed to examine a small sample of adult individuals exposed to as single adversity event. The definition of resilience was narrowed to the small sample of the participants in the current study. This is appreciated by previous researchers who argued that a small research sample restricts the definition of resilience across exposure categories (Bonamo, Wortman *et al.*, 2002; Bonamo, Moskowitz *et al.*, 2005; Bonamo, Rennicle & Dekel, 2005).

The present study is believed to contribute to the literature: Psychological resilience in a fire tragedy context; a mixed-method research design, simultaneously utilizing two different indicators of psychological resilience, that is, BFI, CD-RISC. However, there are a number of general limitations. Based on the findings of the current study, it is not possible to draw conclusions about psychological resilience in samples with other types of trauma exposure. Therefore, future research is recommended to replicate the findings in samples exposed to different types of disasters in different regions of Kenya and around the world, such as resource based inter-tribal conflicts, natural disasters including floods, hurricanes, landslides and road accidents.

The researcher also faced a challenge as most of the participants were not able to read and write; most of them spoke in Kiswahili and the native languages such as Kikuyu and Kalenjin. Therefore, the researcher suggests that it is necessary to have the measurement scales to the local language Kiswahili particularly the CD-RISC. This limitation was a challenge to the researcher and research assistants, but translation was made possible by the local chief and a village elder.

Another limitation of the current study is that it explored a small range of internal and external factors that contribute to resilience; there are other factors that may potentially inform resilient outcomes after adversity. Finally, the small sample size exposed to a single traumatic episode of a fire tragedy limited generalize ability of the study. However, despite these limitations, the current study provides important new knowledge that may help in the understanding of the internal and external factors that contribute to trauma after adversity. The variables in the study emerged as independent and strong predictors of particular significance in promoting resilience after trauma.

Respondents who were highly inclined to spirituality recorded higher resilience scores on the resilience scale. Those who were lowly inclined to spirituality issues recorded lower resilience scores on the resilience scale. Respondents who received social support after the fire tragedy scored highly on the resilience scale as compared to those who did not receive any support. Male respondents who received social support had a higher resilience scale score than the female respondents. Besides, older respondents who received social support recorded higher resilience scale scores than the younger respondents who were accorded the same social support.

Age, gender, personality, spirituality and social support are significant internal and external factors that influence resilience levels of individuals. However, their influence on resilience of individuals vary with spirituality having the greatest influence, followed by gender, social support, personality and age in that order.

5.9 SUGGESTIONS FOR FURTHER RESEARCH

The following recommendations for further research are made:

1. A study to integrate the importance of psychological debriefing in bolstering recovery, thus promote resilience after trauma.

2. A study to integrate biological correlates, community relationships and cultural supports that aid in processes that promote resilience.
3. A study to investigate ways of adapting appropriate interventions that will enhance positive personality traits, social support and spirituality among trauma survivors and boost their resilience.
4. A study to investigate the development and evaluation of preventive interventions that are designed for the purpose of enhancing resilience among traumatized individuals who may be at high risk of experiencing trauma.

Finally, it is the researcher's hope that continued research on the range of factors that influence resilience after trauma will help in guiding future research and theory and provide new interventions that will foster increased resilience in both individuals and communities when faced with extreme adversity.

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APPENDICES:

APPENDIX I:

Ethical Clearance



Ethical Clearance for M/D students: Research on human participants

The Ethics Committee of the Department of Psychology at Unisa have evaluated this research proposal for a Higher Degree in Psychology in light of appropriate ethical requirements, with special reference to the requirements of the Code of Conduct for Psychologists of the HPCSA.

Student Name: Lenah Jepkorir Sambu **Student no.** 46001077

Supervisor/promoter: Dr S Mhlongo **Affiliation:** Dep of Psychology, Unisa

Title of project:

An Investigation of the Factors that Contribute to Resilience After Trauma among the Internally Displaced Persons: A Case Study of Kiimbaa Village, Eldoret East District, Uasin Gishu County, Kenya

Ethical clearance is given to this project without any further conditions	X
Ethical clearance is given on conditions that certain requirements are met (as appended)	
Ethical clearance is deferred as the matter was referred to the Ethics Committee of the CHS, Unisa	
Ethical clearance is deferred until additional information is supplied (see the appended list)	
Ethical clearance cannot be granted on the basis of the information as presented (for reasons as listed in an appendix)	

Signed:

Prof. M Papaikononou
[For the Ethics Committee]
[Department of Psychology, Unisa]

Date: 2013-10-25

**APPENDIX II:
Research Permit**

THIS IS TO CERTIFY THAT

MS. LENAH JEPKORIR SAMBU
OF UNIVERSITY OF SOUTH AFRICA
(UNISA) 0-30100 eldoret, has been
permitted to conduct research in
Uasin-Gishu County
on the topic: AN INVESTIGATION OF
THE FACTORS THAT CONTRIBUTE TO
RESILIENCE AFTER TRAUMA AMONG THE
INTERNALLY DISPLACED PERSONS
CASE STUDY OF KIAMBAA VILLAGE
ELDOROT EAST DISTRICT, UASIN-GISHU
COUNTY, KENYA
for the period ending
6th June, 2013

Applicant's
Signature

Secretary
Signature

National Commission for Science, Technology and Innovation

REPUBLIC OF KENYA

CONDITIONS

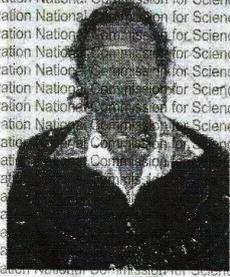
- 1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.**
- 2. Government Officers will not be interviewed without prior appointment.**
- 3. No questionnaire will be used unless it has been approved.**
- 4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.**
- 5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.**
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.**

RESEARCH CLEARANCE PERMIT

Serial No. 2851

CONDITIONS: see back page

Permit No. : NACOSTI/P/14/2322/1582
Date Of Issue: 14th August, 2014
Fee Received: Ksh 2,000





**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,
2241349, 310571, 2219420
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When replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No.

Date:

14th August, 2014

NACOSTI/P/14/2322/1582

Lenah Jepkorir Sambu
University of South Africa
P.O. Box 392
SOUTH AFRICA.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*An investigation of the factors that contribute to resilience after trauma among Internally Displaced Persons. A case study of Kiambaa Village, Eldoret East District, Uasin-Gishu County, Kenya,*" I am pleased to inform you that you have been authorized to undertake research in **Uasin-Gishu County** for a period ending **6th June, 2015.**

You are advised to report to **the County Commissioner and the County Director of Education, Uasin-Gishu County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.


**DR. S. K. LANGAT, OGW
FOR: SECRETARY/CEO**

Copy to:

The County Commissioner
The County Director of Education
Uasin-Gishu County.



National Commission for Science, Technology and Innovation is ISO 9001: 2008 Certified

APPENDIX III:

Participant Consent Form

To be filled by each participant.

Research Project Title: Factors that contribute to resilience after trauma. A case study of Kiambaa Village, Eldoret East District, Uasin Gishu County, Kenya

1. I have read the Information Sheet for this study and have had details of the study explained to me.
2. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.
3. I also understand that I am free to withdraw from the study at any time, or to decline to answer any particular questions in the study.
4. I agree to provide information to the researchers under the conditions of confidentiality set out on the information sheet.
5. I wish to participate in this study under the conditions set out in the Information Sheet.
6. I consent to the information collected for the purposes of this research study and may be used for any other research purposes.

Participant's Name: _____

Participant's Signature: _____

Date: _____

Contact details: _____

Researcher's Name: **Lenah Jepkorir Sambu**

Researcher's Signature: _____

APPENDIX IV:

25 Item Connor-Davidson Resilience Scale

Dear Lena:

Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission for use of the CD-RISC in the project you have described under the following terms of agreement:

1. You agree not to use the CD-RISC for any commercial purpose, or in research or other work performed for a third party, or provide the scale to a third party. If other off-site collaborators are involved with your project, their use of the scale is restricted to the project, and the signatory of this agreement is responsible for ensuring that all collaborators adhere to the terms of this agreement.
2. You may use the CD-RISC in written form, by telephone, or in secure electronic format whereby the scale is protected from unauthorized distribution or the possibility of modification.
3. Further information on the CD-RISC can be found at the www.cd-risc.com website. The scale's content may not be modified, although in some circumstances the formatting may be adapted with permission of either Dr. Connor or Dr. Davidson. If you wish to create a non-English language translation or culturally modified version of the CD-RISC, please let us know and we will provide details of the standard procedures.
4. Three forms of the scale exist: the original 25 item version and two shorter versions of 10 and 2 items respectively. When using the CD-RISC 25, CD-RISC 10 or CD-RISC 2, whether in English or other language, please include the full copyright statement and use restrictions as it appears on the scale.
5. A fee of \$ 10 US is payable to Jonathan Davidson at 3068 Baywood Drive, Seabrook Island, SC 29455, USA, either by PayPal (at: mail@cd-risc.com), cheque, bank draft, international money order or Western Union.
6. Complete and return this form via email to mail@cd-risc.com.
7. In any publication or report resulting from use of the CD-RISC, you do not publish or partially reproduce the CD-RISC without first securing permission from the authors.

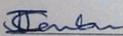
If you agree to the terms of this agreement, please email a signed copy to the above email address. Upon receipt of the signed agreement and of payment, we will email a copy of the scale.

For questions regarding use of the CD-RISC, please contact Jonathan Davidson at mail@cd-risc.com. We wish you well in pursuing your goals.

Sincerely yours,

Jonathan R. T. Davidson, M.D.
Kathryn M. Connor, M.D.

Agreed to by:



Signature

LENAH SAMBU

(printed)

20th February, 2014

DATE

LECTURER

Title

MOI UNIVERSITY

Organization

Signed Agreement form

Jonathan Davidson, M.D. <jonathan.davidson@duke.edu>

Thu, Feb 20, 2014 at 11:54
PM

To: Lenah Sambu <lenasambu@gmail.com>

Hello Lenah:

Thank you so much. I am pleased to enclose copies of the scale and the manual. If there's anything else you need, please let me know.

We are grateful for your interest in the CD-RISC, and wish you well on your study.

Best regards,

Jonathan Davidson

Connor-Davidson Resilience Scale 25 (CD-RISC-25)

initials ID# date // visit age

For each item, please mark an "x" in the box below that best indicates how much you agree with the following statements as they apply to you over the last month. If a particular situation has not occurred recently, answer according to how you think you would have felt.

	not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
1. I am able to adapt when changes occur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I have at least one close and secure relationship that helps me when I am stressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When there are no clear solutions to my problems, sometimes fate or God can help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I can deal with whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Past successes give me confidence in dealing with new challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I try to see the humorous side of things when I am faced with problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Having to cope with stress can make me stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I tend to bounce back after illness, injury, or other hardships.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Good or bad, I believe that most things happen for a reason.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I give my best effort no matter what the outcome may be.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I believe I can achieve my goals, even if there are obstacles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Even when things look hopeless, I don't give up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. During times of stress/crisis, I know where to turn for help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Under pressure, I stay focused and think clearly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I prefer to take the lead in solving problems rather than letting others make all the decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I am not easily discouraged by failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I think of myself as a strong person when dealing with life's challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I can make unpopular or difficult decisions that affect other people, if it is necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. In dealing with life's problems, sometimes you have to act on a hunch without knowing why.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I have a strong sense of purpose in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I feel in control of my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I like challenges.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I work to attain my goals no matter what roadblocks I encounter along the way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I take pride in my achievements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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01-01-13

APPENDIX V:

Big Five Personality Inventory (BFI) Scale

How I am in general

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which **you agree or disagree with that statement.**

1	2	3	4	5
Disagree Strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree strongly

I am someone who...

- | | |
|--|---|
| 1. _____ Is talkative | 16. _____ Generates a lot of enthusiasm |
| 2. _____ Tends to find fault with others | 17. _____ Has a forgiving nature |
| 3. _____ Does a thorough job | 18. _____ Tends to be disorganized |
| 4. _____ Is depressed, blue | 19. _____ Worries a lot |
| 5. _____ Is original, comes up with new ideas | 20. _____ Has an active imagination |
| 6. _____ Is reserved | 21. _____ Tends to be quiet |
| 7. _____ Is helpful and unselfish with others | 22. _____ Is generally trusting |
| 8. _____ Can be somewhat careless | 23. _____ Tends to be lazy |
| 9. _____ Is relaxed, handles stress well. | 24. _____ Is emotionally stable, not easily upset |
| 10. _____ Is curious about many different things | 25. _____ Is inventive |
| 11. _____ Is full of energy | 26. _____ Has an assertive personality |
| 12. _____ Starts quarrels with others | 27. _____ Can be cold and aloof |
| 13. _____ Is a reliable worker | 28. _____ Perseveres until the task is finished |
| 14. _____ Can be tense | 29. _____ Can be moody |
| 15. _____ Is ingenious, a deep thinker | 30. _____ Values artistic, aesthetic experiences |

31. _____ Is sometimes shy, inhibited
32. _____ Is considerate and kind to almost everyone
33. _____ Does things efficiently
34. _____ Remains calm in tense situations
39. _____ Gets nervous easily
40. _____ Likes to reflect, play with ideas
41. _____ Has few artistic interests
35. _____ Prefers work that is routine
36. _____ Is outgoing, sociable
37. _____ Is sometimes rude to others
38. _____ Makes plans and follows through with them
42. _____ Likes to cooperate with others
43. _____ Is easily distracted
44. _____ Is sophisticated in art, music, or literature

APPENDIX VI:

Socio-demographic questionnaire

1. Age:

(a) 20-35 (b) 36 - 55 (c) 56 - 75

2. Gender: Male

Female

3. Marital Status: Single Divorced Separated Married Widowed

4. Education:

Primary school

High School

Certificate/Diploma College

University Degree

Other _____

5. Employment status/occupation:

Full time employment

Unemployed

Part-time employment Homemaker

Self employed

Other specify _____

APPENDIX VII:

Social Support Questionnaire

Read the statements below and decide whether you (1) strongly disagree (2) not decided (3) agree (4) strongly agree (5) disagree.

1. When I had the emergency people I did not know in the community came to help.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
2. I feel good about myself when I sacrifice and give time and energy to members of my family, friends and neighbors.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
3. The things I do for my family, friends and neighbours they also do for me and this makes me feel part of this very important groups.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
4. I know I can get help from the community when I am in trouble.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
5. I had friends who at the time of the adversity let me know they value me for who I am and what I can do to help myself.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
6. People depended on each other at the time of the adversity in this community.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
7. Members of my family listened to my problems during the trauma period and never judged or criticized me.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
8. My friends at the community were always part of my everyday activities at that time of the adversity
Strongly Agree Agree Not Sure Disagree Strongly Disagree
9. I received substantial support from formal groups and charity organizations.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
10. There were times when family members did things that made me unhappy.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
11. I needed to be careful with my friends because they could take advantage of me during the time of adversity.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
12. Living in this community made me feel secure, accepted and loved at that time of the trauma.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
13. The members of my family showed me affection and love at that time of trauma.
Strongly Agree Agree Not Sure Disagree Strongly Disagree
14. There was a feeling in this community that people should not get too friendly to each other.
Strongly Agree Agree Not Sure Disagree Strongly Disagree

15. There were members in this community who supported me and made me feel secure.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

16. I trusted things will work even at the time of trauma because of the encouragement I got from others.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

17. I tried new ways of dealing with the trauma.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

18. I communicated frequently with those willing to help and support me

Strongly Agree Agree Not Sure Disagree Strongly Disagree

19. I received the necessary counseling from support groups and individuals and this helped me to deal with the pain.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

Spirituality Questionnaire

In general, spirituality refers to an awareness of one's inner self and a sense of connection to a higher power, nature, others, or to some purpose greater than oneself.

Respond to the following statement in regards to your spirituality.

1. I enjoy talking spiritual matters with family and friends.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

2. I enjoy sharing with others the problems and joys of living according to my spiritual beliefs?

Strongly Agree Agree Not Sure Disagree Strongly Disagree

3. I enjoy reading the Bible/Koran and other spiritual-related material.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

4. I often do engage in private prayer or meditation.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

5. Forgiveness is an important part of my spirituality.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

6. I seek spiritual guidance in making decisions in my everyday life.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

7. My spirituality is a significant part of my life.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

8. I frequently feel very close to God or a "higher power" in prayer, during my private prayer time, public worship or at important moments in my daily life.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

9. My spiritual views have had an influence upon my life particularly during the time of adversity.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

10. My spirituality is especially important to me because it answers many questions about the meaning of life.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

12. My involvement in spiritual activities in church and in the community has been a source of encouragement.

Strongly Agree Agree Not Sure Disagree Strongly Disagree

13. The support from my Spiritual leader (pastor/priest etc) has been very important to me particularly at that time of the trauma

Strongly Agree Agree Not Sure Disagree Strongly Disagree

APPENDIX VIII:

Focus Group Interview Questions

1. What are some of your thoughts about what's going on in your life right now?
2. What are you satisfied about?
3. What is going on well in your life?
4. How do you rate yourself as an individual?
5. Social support is instrumental at a time of adversity. Explain how helpful social support was for you?
6. Spirituality or spiritual affiliations is important during times of adversity. Is this true for you? Tell us more.
7. Sometimes age affects the way we handle adversities do you think this applies to you? If so what would you have done differently if you were older or younger?
8. At times our gender determines how we handle tragedies psychologically? Explain more. (2 males and 2 females)

Questions to probe those who are quite or have not contributed to the discussions

1. "Some people have said (use the responses of the topics above to ask e.g. spirituality, social support age and gender). See below on how to probe
Do you agree with this?' (Or, "How do you feel about that?")
2. "Are there other recommendations that you have, or suggestions on the factors that contribute to resilience you would like to make?"
3. "Are there other things you would like to say before we wind up?"
4. "Can you say more about that?"
5. "Can you give an example?"
6. "..... says X. How about others of you. What do you think?"
7. "How about you, [Or, "you people in the corner over there...."] Do you have some thoughts on this?"
8. "Does anyone else have some thoughts on that?"

Overview

- What patterns emerge?
- What are the common themes?
- What new questions arise?
- What conclusions seem true?

Observation to be made:

- The environment
- Facial expressions
- Personal care e.g. grooming, health, presentation
- Behaviour/maladaptive
- Level of confidence
- Level of participation in the focus group discussions

APPENDIX IX:

Individual Cases Interview Schedule

A study is being undertaken to examine the factors that contribute to resilience after trauma among the internally displaced persons. This interview guide has been designed to this effect and you are being requested to give the insights on the items outlined in it. Kindly note that the information will only be used for the purpose of the study. All responses will be kept strictly confidential.

Thank you in advance for your valuable inputs.

Sincerely,

Lenah Sambu

Sincerely,

1. What are some of your thoughts about what's going on in your life right now?
2. What are you satisfied about?
3. What is going on well in your life?
4. How do you rate yourself as an individual in terms of your personality characteristics?
5. Social support is instrumental at a time of adversity. Explain how helpful social support was for you?
6. Spirituality or spiritual affiliations is important during times of adversity. Is this true for you? Tell us more.
7. Sometimes age affects the way we handle adversities do you think this applies to you? If so what would you have done differently if you were older or younger?
8. At times our gender determines how we handle tragedies psychologically? Explain more.

**APPENDIX X:
CD-RISC SCORES**

I	R											F										
	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	F1	F2	F 3	F 4	F 5	F 6	F 7	F8	F 9	F 10	F 11
1	3	3	3	4	2	4	0	3	2	2	2	2	1	0	2	3	0	3	2	4	3	4
2	4	4	3	3	2	4	0	3	2	2	4	4	0	3	2	2	4	4	0	3	2	2
3	3	1	3	2	2	4	0	3	2	2	4	4	0	3	2	2	4	3	1	3	2	2
4	3	2	2	4	3	3	2	2	4	4	3	3	4	4	2	2	4	3	1	3	2	2
5	3	2	2	4	2	4	4	4	3	4	2	2	2	4	4	4	2	4	3	1	3	2
6	2	4	3	4	3	2	2	2	4	4	4	2	4	4	2	3	4	4	2	4	3	4
7	2	4	3	4	3	3	4	4	3	3	3	2	2	4	3	4	2	3	1	4	4	4
8	2	4	2	4	3	3	3	3	3	4	3	4	2	3	1	4	3	4	4	2	1	2
9	4	2	3	3	3	2	4	3	4	3	4	4	2	3	1	0	4	3	4	2	2	4
10	1	2	0	3	3	2	4	1	3	4	3	2	4	4	3	3	2	4	4	3	4	3
11	3	4	2	3	3	4	4	3	4	2	2	4	2	4	2	3	4	3	4	2	4	3
12	3	3	2	4	4	3	4	3	4	4	3	3	4	2	3	2	4	4	2	4	4	3
13	4	3	2	3	3	4	3	3	4	1	4	1	3	4	4	2	4	3	3	2	1	4
14	2	4	3	3	4	4	4	3	4	0	3	2	4	4	3	2	3	4	2	4	4	3
15	4	4	4	4	3	3	2	3	4	2	2	4	2	3	2	3	4	2	4	4	2	3
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17	2	4	2	4	4	2	4	5	4	1	4	3	3	4	2	3	3	4	3	4	2	3
18	2	2	0	2	4	3	2	3	3	2	2	2	3	4	4	4	3	4	3	4	2	4
19	4	3	2	4	4	4	4	4	4	4	4	3	2	2	1	3	2	4	4	3	3	4
20	4	4	3	4	0	2	4	4	4	4	3	3	3	4	3	2	1	3	2	2	4	3
21	2	1	4	2	4	3	4	1	2	4	4	3	3	2	3	3	2	2	4	4	2	4
22	2	4	1	4	4	4	4	4	3	4	3	4	4	4	4	4	4	2	3	4	4	3
23	3	4	1	3	3	4	4	3	4	3	2	4	2	4	3	4	4	4	3	4	2	4
24	4	4	0	2	4	4	4	4	2	4	4	3	4	1	2	2	4	4	4	3	4	2
25	3	2	1	4	3	4	4	3	4	4	3	4	2	3	1	3	2	2	4	4	3	4
	60	65	63	62	67	64	59	65	63	59	67	58	58	60	59	66	59	66	57	58	58	58

KEY: M – MALE
F - FEMALE
R- RESPONDENTS
I - ITEMS