

ABSTRACT

NEMIRO, ASHLEY. Understanding Internally Displaced Congolese Women: The Relationship between Coping Strategies and Mental Health Factors. (Under the direction of Dr. Sylvia Nassar-McMillan).

A pressing challenge in the eastern Democratic Republic of Congo (DRC) is how to help survivors and communities overcome the psychological effects of exposure to extreme violence (Watt, & Zimmerman, 2013). The main goal of this study was to obtain a better understanding of the coping strategies of Congolese internally displaced women living in the eastern province of South Kivu. A quantitative study was conducted that included the COPE inventory, the Harvard Trauma Questionnaire (Part IV), and the Hopkins Symptom Checklist. The target population for the study was internally displaced Congolese women residing in the city of Bukavu, Democratic Republic of Congo (n=50). A Pearson Correlation and a Canonical Correlation Analysis was performed to determine the relationship between coping strategies and mental health factors. The results showed a high prevalence rate for both depression and PTSD amongst this population. Furthermore, the results indicated that positive reinterpretation and growth, seeking both instrumental and emotional social support, and active coping significantly decreased mental health symptomology. These findings encourage the development of mental health programs involving the teachings of effective coping strategies to lessen the severity of mental health concerns, along with further investigation into the healing practices of internally displaced women.

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Understanding Internally Displaced Congolese Women: The Relationship between Coping
Strategies and Mental Health Factors

by
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DEDICATION

To the courageous, beautiful, and resilient Congolese women who participated in this study:

Teach Me Peace

Mother, teach me peace.

Everyone is making war, and we hardly see peace.

At school, I learn these things...

I've had enough mother,

I've had enough of war stores.

It's horrible, all the destroyed territories,

The men and women who have perished.

It's despicable, all those machines.

Made for the purpose of killing people.

The whole land is mined and ready to explode...

Mother, teach me peace.

I know all about war and nothing about peace.

All I know is how to hate war.

Nathan, 12 year old Congolese boy

BIOGRAPHY

Ashley Nemiro was born in Scottsdale, Arizona and spent her time between there and the Colorado mountains. Ashley received a Bachelor's of Science in Psychology from Northern Arizona University and her Master's degree from Capella University in Marriage and Family Therapy. During her masters program Ashley traveled to both Ghana and Nepal to work with women's empowerment initiatives. From there, she ran a program for refugee women recently resettled in Colorado, focusing on reintegration and community building through the arts.

As a doctoral student at North Carolina State University, Ashley discovered her passion in Democratic Republic of Congo. Ashley traveled to Congo after her first year of course work to conduct an independent research study on group based mental health therapy for survivors of sexual violence. It was during this time that she founded Mamafrica, a fair trade non-profit organization providing healing arts, economic opportunity, and education to internally displaced women. Ashley has fallen in love with Congo and returned many times throughout her doctoral studies to grow Mamafrica, practice her Swahili, and conduct her dissertation research. Ashley finds inspiration in women's stories of survival and resilience, and knows that her time in Congo has just begun. In addition, Ashley works as a family therapist and group facilitator at Carolina House, a residential facility for women with eating disorders.

In her limited free time Ashley enjoys being outside in the open air, learning to kayak, practicing yoga, vegan cooking, music, and of course exploring every corner of the world.

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CHAPTER 1

Understanding Internally Displaced Congolese Women: The Relationship between Coping Strategies and Mental Health Factors

In December of 2012, while working as a counseling intern in Bukavu, a provincial capital of 800,000 in eastern DRC (Democratic Republic of Congo) and just across the border with Rwanda the researcher met with a displaced 16 year-old girl. The timing of the meeting coincided with the occupation of sister city, Goma, 60 miles north, by M23 rebel forces often prone to acts excessive force and violence and prompting more than 140,000 people to flee their homes. The young woman was shy and apprehensive, but exhibited a kind and gentle demeanor. Within minutes, body tense with emotion and tears dripping down her face, she reports that her father, who was working for the Congolese military in Goma and thus in opposition to the rebels, was forced to move to a safer location to avoid M23 reprisals. This individual's father asked her to accompany him on motorcycle to the next village to help carry luggage. Her father safely relocated, she and the motorcycle driver were stopped on the way home by four members of the M23 and she was harshly questioned as to the whereabouts of her father. Notwithstanding the fear and intimidation, she refused to answer their questions and told them that she would never speak of such a thing, be disloyal to her father, or dishonor his standing.

The four men ordered the motorcycle driver to leave his passenger and from there they took the young women to an empty home and proceeded one by one to rape her. She was then thoughtlessly abandoned... left battered, bruised and utterly on her own. During our meeting, this shame-ridden adolescent confided in the researcher that she went to the health

center three weeks later and tests revealed that she was pregnant. At this point her tears turned into a hopeless wailing and a beseeching prayer to God for forgiveness.

The armed forces sexually abused this woman solely to humiliate and intimidate her father. Now she is left a despairing and traumatized victim of rape with a baby on the way, a living and perpetual reminder of that violent, devastating day and a public underpinning of the notion that in the DRC a woman who is impregnated by rape is seen as “damaged goods”. Undeniably, the trajectory of this young woman’s life will be forever changed.

With more than half a million women and girls having been raped in the last ten years, the UN (2010) stated that the “DRC is the rape capital of the world” (p.1). These women have been sexually violated and then subsequently disowned by their families due to the country’s prevailing social norms regarding rape. Many have contracted HIV and have been internally displaced and forced to flee their villages, often without family or a community upon which to rely. This narrative is a common story that occurs in eastern DRC. A young woman is raped in retaliation for her father’s previous behavior and as a result she will suffer in isolation and silence, without access to mental health services or support from family or community. These women, such as the one described, experience symptoms of posttraumatic stress disorder (PTSD), anxiety, and depression. The Women’s Media Center (2012) reported that the humanitarian situation in the DRC is among the worst in the world, with as many as 5.4 million dead since the beginning of the war in 1998. In Congolese culture, females are discounted and disempowered by the larger sociopolitical structures in place.

Purpose

A pressing challenge in the eastern DRC is how to help survivors and communities overcome the psychological effects of exposure to extreme violence (Watt, & Zimmerman, 2013). The main goals of this study are to obtain a better understanding of the coping strategies of Congolese women and to identify and suggest culturally tailored treatment options. Coping strategies are expressed by cognitive and behavioral efforts to manage difficult external and internal demands (Padyab, Ghazinour & Richter 2013). Looking at the relationship between coping strategies and mental health factors will aid in providing a richer and more in-depth understanding of how this population of women manages stress and hardship through coping strategies. Akinsulure-Smith (2014), stresses that mental health professionals who were trained in Western models have many challenges providing psychosocial care to African women who have been displaced and have survived any type of violence. Rather than attempting to understand this population by studies completed in western nations and using mental health treatment that were developed by western philosophies, this study will provide a platform for a new understanding.

To date, there have been few studies that address the wide growing population of females living in DRC that have been exposed to violence and/or experienced sexual gender based violence (SGBV). The bulk of the limited research studies have looked at the efficacy of western developed mental health treatments by means of group based treatments. This study aims to gain a more in-depth understanding into the coping resources of this population and with the results look further into treatment development. Refugee International urges humanitarian agencies to think differently about the way that they offer support services

(mental health treatment, health care, and social services) because of the atypical displaced population living in eastern Congo (Refugee International, 2014).

Aldwin (2007) summarizes, “that much of psychotherapy involves teaching individual new and presumably more effective coping strategies for dealing with both problems in the environment and ways to regulate their emotions” (p.181). Therefore in order to determine the most effective coping strategies for this demographic of female Internally Displaced Persons (IDP’s) living in DRC, we must first gain a better understanding of their coping strategies in relation to their mental health factors. In order to be culturally effective it is important to understand that mental well-being does not take place in a vacuum, therefore treatment should not take place in a vacuum either and must address the often very complex array of factors that affect both origins of mental health and healing (Bond, 2007).

The present study represents a unique quantitative examination of coping strategies and processes in Congolese women living in IDP camps in the district of South Kivu, one of three regional provinces established by decreed partition in 1986. This study aims to move away from the Eurocentric cultural bias of independence, or one-person-psychology, suggesting instead movement towards collectivist interpersonal ideals and approaches to build a framework for mental health care for Congolese women.

Research Questions

Based on the research goals, the present study addresses the following research questions:

1. What are the relationships between individual coping strategies and mental health factors?

2. What are the relationships between sets of coping strategies and mental health factors?

Problem Statement

In the DRC there is “as yet no law defining the rights and protection of people with mental illness” (Ghodse, 2011, p. 3011). According to the United Nations (UN) mapping report, “almost every single individual has an experience to narrate of suffering and loss” (UN, 2010, p.1). The continuing threat of violence has taken a catastrophic toll on the population, including increased exposure to SGBV. In eastern DRC, SGBV is increasingly used as weapon of war, resulting in dozens of attacks daily (Human Rights Watch, 2009, 2011, 2012; Petersen, Bhana & Baillie, 2011), and includes many children and adolescents (Nelson, Collins, VanRooyen, Joyce, Mukwege, & Bartels, 2011). Although prevalence rates are notoriously inaccurate, Peterman, Palermo and Bredenkamp (2011) estimate that, based on DRC’s 2007 demographic and health survey, approximately 1.69 to 1.80 million women were raped and more than 3 million experienced intimate partner sexual violence over the course of their lives. More recently, a household survey conducted in eastern DRC in 2010 showed that, of 998 respondents, 39.7% of women and 23.6% of men reported sexual violence. Of those interviewed, 41% met the criteria for major depressive disorder and 50.1% met criteria for posttraumatic stress disorder (Johnson, Scott, Rughita, Kisielewski, Asher, Ong & Lawry, 2010).

Indeed, exposure to gender based violence has been definitively linked to negative health, mental health, and psychosocial and community outcomes worldwide (Jordan, Campbell, & Follinstad, 2010; Silove, Rees, Tam, Liddell & Zwi, 2011). Survivors are

increasingly stigmatized and rejected by their communities and subject to increased rates of posttraumatic stress disorder, depression, and anxiety. In consequence, not only are survivors likely to suffer emotionally and socio-economically, but their absence, marginalization, and untreated psychological distress ruptures their families and communities—thus increasing the likelihood of child neglect and intergenerational transmission of trauma (WHO, 2005).

These realities underscore the need for effective, widely available mental healthcare services in DRC. While a system of family-based, religious, and traditional healing provides critical support, the World Health Organization (WHO) Mental Health Atlas in 2011 observed that in DRC “mental health and mental hospital expenditures by the government health department/ministry are *not available*” (p.1) and “the majority of primary health care doctors and nurses have received no official in-service training on mental health within the last five years, and officially approved manuals on the management and treatment of mental disorders are not available in the majority of primary health care clinics” (p.1). Hence, there is a need for officially recognized education and training in mental health.

Despite the high rates of depression and anxiety disorders among women and the growing public health concern, the mental health of women is a neglected area, particularly in Africa. Alem (2010) describes that at the time of her study conducted on mental health care in Africa, only 56.6% of African nations reported having community based mental health care in place. Even though some countries have these services through the ministry of health, the treatment gap is a result of implementation, resources, and the inability to reach people in need in rural areas. Furthermore, Alem, Jacobsson and Hanlon (2008) report that there is a scarcity of adequately trained mental health professionals. Often times, family

members and religious leaders in the community take on the burden of dealing with mental disorders.

Currently, in the South Kivu region of the eastern DRC there is minimal access to mental health care and trained personnel to provide these services. Patel (2012) reports that the WHO estimates that there are nearly five hundred million people living on the planet who are affected by mental illness. Being that the DRC has experienced over 16 years of war, violence, and mass rape, the need for adequate mental health services is a serious matter. According to the UN (2012) Mental Health Atlas, there is only one mental health outpatient facility in all of the DRC and six mental health hospitals, none of which work with children or adolescents.

With the DRC being a vast, undeveloped country of 905,600 square miles, most of the population does not have the means or the resources to travel the long distances to the mental health hospitals, nor do they need the intense level of care that is provided at these hospitals. One of the main barriers to services, reports Mukwege, Lipton, Kelly, Jocelyn, Betancourt, Theresa, (2011), is the problem with access to care. While there are small health clinics in the villages, the nurses are not currently trained to recognize mental health problems or provide basic counseling services.

Need for the Study

To date there has been no research that has looked at the coping strategies and mental well-being of Congolese women. Patel (2012) reported during a recorded TED Talk, that in Low-Middle-Income-Countries 90% of individuals needing access to mental health care are currently not receiving it, due to a gap in services and the lack of trained professionals. Patel

(2012) continues to report WHO estimates of nearly five hundred million people living on the planet who are affected by mental illness. In the DRC there is a population of 75 million and with little access to mental health services thousands of people go untreated.

The exploratory research in this paper will facilitate a clearer understanding of the relationship between coping strategies and mental health factors, and it will raise the practical considerations and implications for development of wide spread mental health programs and treatment. Findings will generate awareness and knowledge to improve mental health practice and inform policy, and also form the basis for further research.

This study will indirectly support the women of eastern DRC by providing behavioral and cultural insight and a more in-depth understanding of mental health factors and coping strategies. To improve treatment outcomes Beutler, Harwood, Kimpara, Verdirame and Blau (2010) conducted research on coping styles, and suggest that an individual's coping determines one's likelihood to respond to different methods of psychotherapy. Their findings beg additional research and support the *Lancet's* journal call for action on global mental health and the need for research on the delivery of evidence-based-treatments, as reported by Yasamy, Maulik, Tomlinson, Lund, Ommeren and Saxena (2011). The present study serves to support this call to action, one in a planned series, and in anticipation it will build a larger more effective and efficient model of IDP mental health care that can be widely adapted and disseminated.

Definition of Terms

Sexual gender based violence (SGBV): “Includes sexual threat, assault, interference, exploitation, humiliation, molestation, incest, involuntary prostitution, torture, insertion of

objects into genital openings and attempted rape, including statutory rape, carried out against on women and girls or men and boys” (Colombini, 2002, p.168).

Internally displaced person (IDP): “People forcibly uprooted within their own countries by war and human rights abuse” (Cohen, 2006, p.87). Cohen (2006) estimates that there are 12-13 million IDPs in Africa and the highest mortality rates ever recorded during humanitarian emergencies involve IDPs.

Mental Health Factors: The mental health factors measured in the study include depression, anxiety, and PTSD.

South Kivu: Province located in eastern Democratic Republic of Congo with three main cities of importance Bukavu, Baraka, and Uvira.

Stress: “Is thought to arise when an individual perceives a discrepancy between the demands of a situation and their ability to cope with those demands” (Kelso, French, & Fernandez, 2005, p. 3).

Coping Terminology

Coping: Coping is defined as, “the multidimensional process that involves an individual’s constantly changing cognitive and behavioral efforts to manage taxing external and/ or internal demands accessed as exceeding personal resources” (Martz & Livneh, 2007).

Acceptance: an emotion-focused strategy where the stressor is accepted (Carver & Scheier, 1994).

Active Coping: a problem-focused strategy that involves taking direct action to remove the stressor (Carver & Scheier, 1994).

Alcohol-Drug Disengagement/Substance Use: a strategy whereby an individual

focuses on escaping the stressor (Carver & Scheier, 1994).

Avoidant-coping style: are associated with personality characteristics and outcomes that are negative (Litman, 2006). Avoidant coping style includes behavioral disengagement, denial, substance use, and mental disengagement.

Behavioral Disengagement: a strategy that involves reducing effort to deal with the stressor (Carver & Scheier, 1994).

Denial: a emotional-focused strategy where the stressor is ignored (Carver & Scheier, 1994).

Focusing on and Venting of Emotions: a strategy whereby an individual focuses on the stressor, and vents his emotions (Carver & Scheier, 1994).

Humor: a form of communication that is intended to result in or bring forth amusement or laughter; and/or is a strategy whereby an individual focuses on relief from the stressor (Carver & Scheier, 1994).

Mental Disengagement: a strategy involving the use of mental distractions and activities to distract an individual from thinking about the stressor, such as daydreaming, or escaping through television (Carver & Scheier, 1994).

Planning: a problem focused strategy that involves thinking about dealing with the problem (Litman, 2006).

Positive reinterpretation and growth: an emotion-focused strategy where the individual manages emotional distress rather than the stressor itself (Carver & Scheier, 1994).

Religious Coping: an emotion-focused strategy involving the use of faith for support

(Litman, 2006).

Restraint Coping: a problem-focused strategy that involves holding back for a more appropriate opportunity to deal effectively with the stressor (Carver & Scheier, 1994).

Seeking Social Support for Emotional Reasons: an emotion-focused strategy that involves support from others to cope with the stressor (Carver & Scheier, 1994).

Seeking Social Support for Instrumental Reasons: a problem-focused strategy of seeking outside assistance to deal with the stressor (Carver & Scheier, 1994).

Self-sufficient problem focused coping style: are directed towards reducing or eliminating a stressor. Self-sufficient problem focused coping style includes planning, active coping, and suppression (Carver & Scheier, 1994).

Self-sufficient problem emotion focused coping style: are directed towards changing one's own emotional reaction. Self-sufficient emotion focused coping style includes restraint, positive reinterpretation, acceptance, humor, and religion (Carver & Scheier, 1994).

Socially supported coping style: are perceived resources from you social network. Socially supported coping style includes emotional social support, instrumental social support, and venting. (Lopez-Martinez, Esteve-Zarazaga, & Ramirez-Maestre, 2008).

Suppression of Competing Activities: a problem-focused strategy that involves putting aside or avoiding other tasks to be able to deal with the stressor (Carver & Scheier, 1994).

Organization of the Study

The dissertation includes five chapters. Chapter One, seen above, consists of a stage-setting anecdote, the purpose, problem statement, and importance of the current study.

Definitions of terms are also included to help readers clarify terms throughout the

dissertation. In Chapter Two, a brief history and literature review is provided on previous studies and research conducted on Congolese mental health and relevant theoretical frameworks. The framework discussed is the history of the DRC, methodology, coping strategies, stress, and relational cultural theory (RCT). Chapter three includes the method section, an in-depth description of the participants and procedures used.

CHAPTER 2

Review of History, Literature, and Theories

The DRC has a dire history of war, exploitation, and human rights abuses. The purpose of this study is to gain knowledge to inform future mental health treatment modalities specific to Congolese women. This section focuses on the turbulent and complex history of the DRC, relevant literature, and theories that inform the research.

Democratic Republic of Congo History

DRC has experienced over 16 years of war and a legacy of human rights abuses. Although it is one of the poorest countries in the world, DRC is ironically one of the richest in natural resources. Home to some of the rarest minerals including gold, coltan, carbonite, tin, and tungsten, the DRC supplies many of the key elements that are essential to our cell phones, laptops, and other electronic goods. Armed forces are fighting to control and extract these rare minerals, selling them to organizations that supply these key ingredients to companies worldwide. Armed forces are comprised of individuals from over nine different countries, making the conflict difficult to eradicate. They are looting villages for resources, displacing communities, capturing children to fight in their armies, killing the men who were the providers of the families and using rape as a war tactic to control and suppress the women, men and children.

In the DRC women are seen as expendable and there is a lucid unequal differentiation of power between men and women, making it easier for armed forces to commit gender-based violence (GBV). Sexual violence is used as a war tactic for many reasons, but with the same goal: to break down the strong fabric of Congolese society. Armed forces will use rape

as a way to humiliate and intimidate in order to systematically further military objectives. (Baaz, & Stern, 2010). This tactic is also a way to vicariously commit a violent act against the male family members including husbands, fathers, sons, and the extended family. Eriksson et al. (2010) point out that in literature written about conflict zones and violence, men and boys are often seen as (non) survivors of violence, yet they are affected by the trauma as well.

Armed forces will also use rape as a way to control abundant natural resources. Hirsch and Wolfe (2012) reports that in DRC rape is often targeted at women and girls who live in villages close to mines and other money making enterprises. Armed groups will loot and pillage villages for supplies and food, ensuring the safety of themselves and their fellow soldiers. Lastly, armed forces have used rape as a way to retaliate against women whose husbands are figureheads in the community... a raw expression of jealousy, -anger and frustration.

Mental Health in East Africa

In East Africa, family and community ties are exceptionally strong, based on powerful religious beliefs and a sense of truth and purpose rooted in the family, the church, and the community. Culturally compatible delivery and treatment methods, incorporating valued cultural idioms and rituals, are thus essential components to psychosocial support and mental health care in east Africa, especially when working with women who have been displaced from their homes or experienced varying degrees of violence and extreme poverty. Mental health treatment must emphasize the movement away from the Eurocentric cultural bias of independence, or one-person-psychology, to the movement towards collectivist interpersonal

ideals. The burden of mental health problems is increasing in low-middle income country (LMIC) and in order to narrow the gap, there is a large need to conduct research on evidence-based treatments (Yasamy et al., 2011) applicable to the cultural context and ideologies of the people.

In a recent study conducted in Uganda and Rwanda by Bolton, Bass, Neugebauer, Verdeli, Clougherty, Wickramaratne and colleagues (2003) group intervention was shown to be more effective than individual talk therapy in relieving depressive symptoms in both men and women. The investigators pointed out that, “In Sub-Saharan Africa, conditions are very different from those in which psychotherapy was developed, in ways that could reduce effectiveness” (Bolton et al., 2003, p. 3117).

Bolton et al. (2003) conducted a quantitative clustered randomized trial study to look at the effectiveness of group interpersonal psychotherapy for depression in rural Uganda. This study was chosen to take a deeper look into a study in rural Africa looking at the effectiveness of interpersonal psychotherapy (IPT) for depression among both males and females. IPT is a model of interest and therefore it is important to objectively analyze studies that use IPT as an intervention in a similar cultural setting.

The participants represented males and females over the age of 18, from 30 villages in the Masaka and Rakai districts in rural Uganda. In these 30 villages participants chosen for the study verbalized that they believed they had depression like symptoms. Other members in the village were asked to confirm the individuals claim that they experienced depression-like symptoms. Each person with depression-like symptoms was asked to complete the Hopkins Symptom Checklist (HSCL) and the Harvard Trauma Questionnaire (HTQ) to determine if

they met the criteria for depression based on the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM, IV)*. Bolton et al. (2003) translated the HSCL and the HTQ into Kiswahili and back translated both instruments to ensure validity and reliability of the Kiswahili instruments.

The findings concluded that the decline in depression scores were significantly greater among the intervention groups. The mean change for the intervention group on the depression scale was 17.47 and 3.55 for the control group. The mean changes for men being slightly lower than the women, in the intervention group. Bolton, et al. (2003) concluded that due to the nature of the study design, it was inconclusive if IPT was the effective element responsible for the severity of depression scores decreasing or if the group dynamics and universality fostered the change.

In conclusion, the group IPT was effective in reducing depression-like symptoms experienced by adults in the rural villages of Uganda. Secondly, the researchers discovered that it is possible to run clinical trials in this setting. It is uncertain how long the effects of IPT will last and there is no mention of follow up application taking place in the future. In addition, the intervention that was offered was proven to be efficacious but there was no plan to continue to offer IPT groups to other locals or train local staff to administer the group IPT method. When entering low-middle income countries and providing mental health relief through group psychotherapy, the researchers should devise a plan that would build sustainability to continue to provide services to males and females in need. The study's external validity was strong since they interviewed a large diverse sample size using cluster randomization throughout 30 different villages (Heppner, Wampold, & Kivlighan, 2008).

The authors express that they were unable to eliminate every threat to internal validity. The two group leaders were trained in the United States on how to properly run IPT groups but it was the first time they had been to Africa or worked with African clients. The study generally adhered to the guidelines that are stated by Heppner et al. (2008) for a quantitative analysis study.

In a previous study done by Bolton (2001), “criterion validity was assessed by comparing depression diagnoses based on the HSCL with diagnoses by local people of the locally recognized illness most similar to depression” (p.240). The Cronbach’s alpha showed that there was good internal reliability compared to the DSM IV, which indicates the measure is adequate for the local expression of depression.

Petersen et al. (2011) sought to find a solution to fill the large treatment gap for depression and other mental health concerns in Africa and other low middle-income countries. Petersen, Bhana, Campbell-Hall, Mjadu, Lund and Kleintjies (2009) suggest that in order to close the treatment gap in mental health service accessibility providers are challenged to adapt a task-shifting approach that integrates mental health services into primary care settings. Task shifting is accomplished by training non-specialists, under the supervision of mental health professionals, to provide mental health services (Petersen et al., 2011).

The rationale for the pilot study was to determine the feasibility of adapted group based IPT for the treatment of depression by community health workers within the context of a task-shifting model. The purpose of the regression analysis is to determine the impact of the group based IPT for the treatment of depression. The sample population was comprised of 60

females, due to eligibility. Of the 60 females, all were 18 years and older, with similar education backgrounds and low socio-economic levels. The authors report that only women were asked to participate in the study because men did not frequently visit the primary health care clinics (Petersen et al., 2011). Each female had previously visited the clinics in the Hlabisa province of South Africa and purposive sampling was used to enlist participants into the study.

Each participant, following the informed consent, was given the Self-Reporting Questionnaire (SRQ), which was administered by a mental health professional. The SQR has been validated in South Africa by two community-based studies. Next, the participants were asked to complete the Beck Depression Inventory (BDI) and Hopkins Symptom Checklist (HSCL). The authors summarize that the BDI has previously been used in South Africa and found to be a reliable screening device to determine the severity of depression symptoms (Petersen et al., 2011). The HSCL has been used globally to screen for depression and anxiety. Petersen et al. (2011) report that the Cronbach reliability co-efficient for the BDI pre and posttest intervention was .71 and .86. The reliability co-efficient for the HSCL was .91 and .95. The Cronbach's alpha is used to estimate the reliability of a psychometric test also known as the internal consistency estimate of reliability of test scores (Heppner et al., 2008). According to the internal consistency table, the BDI has good internal consistency and the HSCL is excellent, based on the alpha.

Eligible participants were placed into a treatment group (n=30) or the control group (n=30). Participants were therefore randomly assigned, which caused a threat to internal validity. Heppner et al. (2008) identified random assignment to groups as "the best way to

make groups comparable” (p. 92). The authors report that they were unable to randomly assign the participants based on the availability of the participants. The 30 participants in the treatment group were broken up into four separate 12-week IPT therapy groups. The control group received the standard level of care by their primary health care nurses. Leading the IPT groups were trained community health care workers, who received supervision from a mental health professional. Petersen et al. (2011) summarizes that the training of 30 community health care workers was completed over the course of two, four-day workshops.

The data collection process was obtrusive because participants were given all three of the screening instruments at baseline, after the 12-week intervention, and 24 weeks post baseline. Due to high levels of illiteracy, the screening instruments were administered to the participants and not self-reported.

The regression analysis of variance was explained and clearly stated in the article. Petersen et al. (2011) concluded in the result section that the analysis of the data indicated that IPT intervention lead to a reduction in depressive symptoms. Attrition was a factor in this study, with only 23 (77%) completing the program. Compared to the control group, at 12-week post intervention, the treatment group’s depression scores had moved from severely depressed range to the mild range. The control group scores did not change over time and stayed in the severe to moderate range ($F(2, 1.739)=46.645, P < 0.0001$). The HSCL scale concluded similar results; the scores for both groups pre intervention were in the range of psychological dysfunction. At 12 weeks post intervention the scores had dropped for the treatment group, in the normal range, and had stayed the same for the control group ($F(2, 1.651)=34.55, P < 0.0001$).

In addition to the quantitative measures, the authors asked nine participants from the treatment group to be involved in a qualitative analysis piece of the study. The sampling was purposive and the interviews were conducted to understand the experience of being in an IPT group to lower the severity of depression symptoms. The qualitative approach was inductive because the data was first analyzed to derive greater understanding and meaning. The role of the participants followed an emic approach based on the nine local participants being asked to share their experience (Kottak, 2006). This was an experience that was unique to them and could not be explained by an individual who was not present in the group.

The interviews were recorded in isiZulu, translated, and then transcribed into English, with back translations. The authors do not go in depth into the process of coding and developing themes, which is a weakness to the study. Although, the authors did report the findings for the qualitative piece and presented the themes: development of cognitions that were more positive, improved interpersonal skills, improved personal agency, and the improved capacity to cope with stressful situations at an interpersonal level. Petersen et al. (2011) summarized that the qualitative study suggested that the interpersonal triggers of depression taught in the IPT groups were applicable to rural South Africa.

Petersen et al. (2011) conducted a pilot mixed methods approach to determine the feasibility of adapted group based IPT for the treatment of depression by community health workers in within the context of a task-shifting model. They did not minimize all the common threats to validity, because they did not randomly assigning participants to groups but they did use measures with established reliability. Petersen et al. (2011) were able to confer that the South African adaptation of IPT is feasible and acceptable to the population of

study. Furthermore, trained and supervised community health care workers in South Africa can successfully deliver the IPT groups. Petersen et al. (2011) recognized the limitations of the study and suggested that a randomized control trial would need to be done in the future to establish the effectiveness of the delivery of the IPT intervention and the generalizability to larger populations.

Mental Health Risks

Currently in the South Kivu region of eastern DRC there is minimal access to mental health care and trained personnel to provide these services. During a recorded TED talk, Patel (2012), reported that in LMIC's 90% of individuals needing access to mental health care are currently not receiving it due to a gap in services and the lack of trained professionals. Patel (2012) continues to report that the WHO estimates that there are nearly five hundred million people living on the planet who are affected by mental illness. Considering the DRC has experienced over 16 years of war, violence, and mass rape, the need for adequate mental health services is a serious matter.

Currently, according to the UN (2012) Mental Health Atlas, there is only one mental health outpatient facility in all of the DRC and six mental health hospitals, none of which work with children and adolescents. With the DRC being a country that is 905,600 square miles, most of the population does not have the means or the resources to travel the long distances to the mental health hospitals, nor do they need the intense level of care that is provided at these hospitals. One of the main barriers to services, reports Mukwege (2011), is access to care. While there are small health clinics in the villages, the nurses are not currently trained to recognize mental health problems or provide basic counseling services.

Mukwege et al. (2011), through the Harvard Humanitarian Initiative in 2007, preformed a study to characterize the experience of sexual and gender based violence perpetrated on females. Data collected in 2011, as reported by their article in the *American Journal of Public Health*, concluded that 40% of females in the eastern DRC reported having experienced sexual violence (Mukwege et al., 2011). The research population consisted of a non-random sample of 225 female patients who were either patients at the hospital due to gynecological concerns or enrolled in a community-based program in the rural villages. Of the 225 females (n=193, 75.7%) answered that they had been subjected to sexual violence. Of these 193 females (n=48) participated in one of the five separate focus groups. The initial survey was comprised of questions suitable for all women whether or not they had experienced sexual violence. Of the 193 females in the study, 163 reported that they were sexual assaulted by strangers and 133 of these females reported being gang raped. As a result of rape, 29% of the females were rejected by their families and husbands. The key theme that arose out of the qualitative research included: rejection/stigmatization, children from rape, services and justice. Rejection and stigmatization was a dominant theme throughout the five focus groups. The women explained being stigmatized by other members of the village and even by her family. In Congolese culture, regardless of whether the women consented to the extramarital sex or not, she is perceived to have brought dishonor to the household and to the community. According to Relational Cultural Theory, this phenomenon of long-term isolation and marginalization is described as social stratification. Women are seen as lower in the stratification milieu, less worthy and of less value than men. Therefore, if the woman

dishonors their household, it is socially acceptable to kick her out of the community since she was ostensibly responsible for a disgraceful act.

Research has shown that there are high rates of psychological disturbances amongst refugees and IDPs who have been exposed to displacement, war, and disasters (Porter & Haslam, 2005). Moreover, IDPs who were forced to flee their homes experience diverse stressors that can accumulate over the process of resettlement, and can include marginalization, economic disadvantage, loss of social support, loss of family members, loss of community, and loss of employment.

Relevant Theoretical Frameworks

Most of the current theories and models cannot adequately describe or embody the experience of a Congolese female IDP or explain the relationship between mental health factors and coping strategies within this fragile and vulnerable population. With the main goals of the research focused on gaining understanding of the relationship between these factors, the model of coping (Lazarus & Folkman, 1984; Carver, Scheier & Weintraub (1989) and relational cultural theory (Jordan, 1997) are being examined because they bridge the knowledge gap that exists and provides a framework for the study. It is important not to generalize the experience of this specific population and view them as homogeneous; therefore throughout this manuscript basic models and theories will be used to gain a more in-depth understanding of the tenants of the research.

Coping is the unique process of managing the demands created by stressful life events and an individual's effort to resolve endure, or alleviate problems (Taylor & Stanton, 2007 & Lazarus & Folkman, 1984). Coping is defined as "action-oriented and intrapsychic efforts to

manage demands created by stressful events” (Taylor & Stanton, 2007). “The hallmark of coping strategies is that they require effort-whether conscious or unconscious-whether in their task of managing negative affect and stressful situations, whether temporary or chronic” (Aldwin, 2007, p.96).

The process model of coping by Lazarus and Folkman (1984) was used as a building block when Carver et al. (1989) developed the COPE inventory. The process model of coping posits that, “cognitive processes of appraisal are central in determining whether a situation is potentially threatening or harmful, and thus cognition determines both the perception of stress and the individual’s emotional reaction to it, or perception” (Lazarus as cited in Aldwin, 2007). Lazarus and Folkman (1984) defines the appraisal of stress as an individual event and continues to say what is stressful for one person may not be stressful for others or the same individual at another point in time. Aldwin (2007) explains that coping strategies have “situation specific effects” (p.183), meaning that one coping strategy may have one effect in a certain situation and the opposite in another. In this model five types of cognitive appraisal are identified: harm, threat, loss, challenge, or benign and Aldwin (1990) adds the concern over others’ problems, annoyed, and at a loss.

Lazarus (1966) stated, “For threat to occur, an evaluation must be made of the situation, to the effect that a harm is signified. The individual’s knowledge and beliefs contribute to this” (p. 44). Appraisal of threat is a judgment of assimilated data with ideas and expectations, and relies on the stimulus as well as the psychological makeup of the individual. “Observable threat and stress reactions are reflections or consequences of coping processes intended to reduce threat” (p. 152). He added, “Threat leads to processes of coping

with the threat” (p. 153). While primary appraisal is concerned with determining threat and amount of danger, secondary appraisal is concerned with the form of coping to use and to what extent any form of action will relieve the threat. “More adaptive and reality-oriented forms of coping are most likely when the threat is comparatively mild; under severe threat, pathological extremes become more prominent” (p. 162). The higher the degree of threat, the more primitive reaction or solution there is to it. When threat becomes great, cognitive functioning is impaired, resulting in the choice of the more primitive action.

Kelso et al. (2005) summarizes that the basic tenet of the model is that the process of coping has a mediating effect of stress on one’s wellbeing. Folkman and Lazarus (1984) include five coping strategy resources including: (1) problem solving skills, (2) social networks, (3) general and specific beliefs (locus of control, self-efficacy, and existential belief), (4) health, energy, and morale resources, (5) Utilitarian resources (money, tools, and special training). Coping is either problem focused, used to manage the problem that is causing the stress, or emotion focused which is aimed at regulating one’s emotions. Chao (2011) summarizes Lazarus and Folkman’s process model of coping as having three tenants: (1) *perceived stress*-the relationship between the person and the environment as exceeding available resources, (2) *appraisal*-one’s perception and assessment of the situation, (3) *coping*-effortful or purposeful thoughts and actions to manage or overcome stressful situations.

Coping

Using Folkman and Lazarus (1980) research as a foundation, Carver et al. (1989) developed the COPE inventory that was used to assess a wider variety of coping-styles

(Litman, 2006). Carver et al. (as cited in Litman, 2006) recognized that the problem-focused and emotion-focused coping was important but wanted to expand on Folkman and Lazarus's model. Carver et al. (1989) explain the 15 scales of the COPE inventory as:

1. Active coping is a problem-focused strategy that involves taking direct action to remove the stressor.
2. Planning is a problem-focused strategy that involves thinking about the stressor and how to cope with it.
3. Suppression of competing activities is a problem-focused strategy that involves putting aside or avoiding other tasks to be able to deal with the stressor.
4. Restraint coping is a problem-focused strategy that involves holding back for a more appropriate opportunity to deal effectively with the stressor.
5. Seeking social support for instrumental reasons is a problem-focused strategy of seeking outside assistance to deal with the stressor.
6. Seeking social support for emotional reasons is an emotion-focused strategy that involves support from others to cope with the stressor.
7. Positive reinterpretation and growth is an emotion-focused strategy where the individual manages emotional distress rather than the stressor itself.
8. Denial is an emotion-focused strategy where the stressor is ignored altogether.
9. Acceptance is an emotion-focused strategy where the stressor is accepted.
10. Turning to Religion is an emotion-focused strategy where the individual turns to religion as a means of coping with a stressor.
11. Focusing on and venting of emotions is a strategy whereby an individual focuses on

- the stressor, and vents his emotions.
12. Behavioral disengagement is a strategy that involves an individual reducing effort to deal with the stressor.
 13. Mental disengagement is a strategy involving the use of mental distractions and activities to distract an individual from thinking about the stressor, such as daydreaming or escaping through television.
 14. Alcohol-drug disengagement is a strategy whereby an individual focuses on escaping the stressor. Humor is a strategy whereby an individual focuses on relief from the stressor.
 15. Humor is a strategy whereby an individual focuses on relief from the stressor.

Carver et al. (1989) identified four factors of coping strategies that would expand on the Folkman and Lazarus (1980) model. The first factor, self-sufficiency, corresponds closely with problem-focused coping and includes planning, active coping, and suppression of competing activities. The second factor, avoidant coping includes behavioral disengagement, denial, substance use, and mental disengagement. The fourth factor, socially supported coping, includes emotional social support, instrumental social support, and venting. And lastly the fourth factor is self-sufficient coping, similar to emotion-focused coping, and includes restraint-coping, positive reinterpretation, acceptance, humor, and religion.

Carver and Scheier (1994) expand on Lazarus and Folkman's model of coping, acknowledging that coping can change moment to moment but pointing out that people also develop habitual ways to deal with stress and how they present themselves during new situations. Carver and Scheier (1994) look at this assumption in their research on situational

coping and coping dispositions in a stressful transaction among 125 undergraduates at the University of Miami. Each participant was asked to complete the COPE inventory at the beginning of the semester along with a self-assessment to rate his or her stress levels over the course of the semester and before the final exam, following the exam, and after a final examination grades were distributed. Findings from this study reveal, as previously noted by others, stressful encounters differ sharply from one stage to another. Initial coping was focused on the anticipation of the exam and students reported using active coping—planning, suppression of competing activities, and acceptance—and three classes of affect: threat, harm, and benefit appraisal. Directly following the exam, the coping strategies were dysfunctional avoidant coping. After the grades were received, participants who had done poorly reported high levels of problem-focused coping. Moreover, coping did not predict lower levels of future distress and, “in no case did coping prospectively predict a reduction in negative emotions” (p. 194). Mental disengagement before the exam predicted higher levels of threat after the exam, and when participants reported problem-focused coping after the exam there was higher levels of threat.

Mental Health and Coping

“Much of psychotherapy involves teaching individuals new and presumably more effective coping strategies for dealing with both problems in the environment and ways to regulate their emotions. Thus it makes certain amount of sense to study how individuals cope in order to determine what are the best ways to achieve an individual’s goals, and the vast majority of coping research utilizes mental health” (Aldwin, 2007, p.181). It is reported that people with mental health issues have low levels of self-reported coping mechanisms (Taylor

& Stanton, 2007). McWilliams, Cox and Enns (2003) summarize that numerous studies have found a significant association between coping strategies and emotional distress. In addition, prior exposure to trauma may lessen individuals' resources and weaken their ability to cope with future stressors (Schuster, Hammitt, & Moore, 2003).

Different studies show a variety of results in terms of the relationship between coping strategies and the connection to mental health. It is well known that different people use different strategies of coping when they are in negative affect states or experiencing life problems. "Stress and coping variables can account for as much as 50% of the variance in outcomes such as depression or psychological symptoms (Aldwin, 2007, p.182).

An analysis by Kasi, Naqvi and Afghan et al. (2012) they looked at the coping styles among 162 participants in Pakistan using the brief COPE inventory, which is comprised of 28 questions. The objective of the study was to identify and estimate the frequency of the different coping mechanisms used by patients with symptoms of anxiety and depression. They listed maladaptive coping strategies as: behavioral disengagement, denial, self-distraction, self-blame, substance use, and venting and adaptive coping strategies as: active coping, instrumental support, planning, acceptance, emotional support, humor, positive reframing, and religion. Each participant was asked to take the brief COPE and the Agan Khan University Anxiety and Depression Scale (AKUADS).

The prevalence of anxiety and depression was 32% and females were two times more likely to experience symptoms of anxiety and depression. They reported that marital status, mother tongue, and socioeconomic status were not related to anxiety and depression. Of the 14 coping styles in the brief COPE and the 32% of participants that had symptoms of anxiety

and depression, 48% used religion as a coping strategy, 34.6% used acceptance, 32.7% used instrumental social support, 30.8% used active coping, and 28.8% used planning and emotional support. Moreover, they found that active coping was associated with lower levels of anxiety and coping by venting was correlated with greater levels of anxiety and depression (Kasi et al., 2012).

In a meta-analysis of the relationship between coping and health factors, including mental health Penley, Tomaka and Wiebe (2002, as cited in Aldwin, 2007) found that problem-focused coping was related to better mental health. Moreover Penley et al. (2002, as cited in Aldwin, 2007) found that social support and emotion-focused coping were associated with higher levels of psychological symptoms. Fledderus, Bohlmeijer and Pieterse (2010) conducted a cross-sectional study to determine if experimental avoidance mediated the effects of maladaptive coping styles on psychopathology with 93 participants in the Netherlands. Experimental avoidance is defined as, “the reluctance to remain in contact with experiences such as feelings, thoughts, and bodily sensations, and attempts to alter, control, predict, or avoid the form, the frequency or the contexts in which these experiences arise” (p. 504). They found that passive coping was strongly correlated to experimental avoidance and concluded that people with high levels of experimental avoidance feel overwhelmed by their problems. Moreover, passive coping and experimental avoidance showed a relationship that was moderate with depression and anxiety. Fledderus et al. (2010) concluded that the relationship between depression and anxiety are mediated by experimental avoidance.

These studies echo what Carver et al. (1989) and Lazarus and Folkman (1980) posited: that everyone is going to have different coping strategies and “there is no silver

bullet in coping that works for everyone” (Aldwin, 2007, p.182). Austenfeld and Stanton (2004) attempted to address this paradox in studies on the effect of emotion-focused coping. They found that among the assessment inventories of coping, many of the items under the emotion-focused coping scale could be credible with symptoms of psychological distress. For example, rumination or the focus on and venting of emotions have shown to be associated with symptomology of depression and PTSD. Austenfeld and Stanton (2004, as cited in Aldwin, 2007) developed a new scale to measure coping that included emotional processing and emotional expression, which are not seen in the COPE inventory. McWilliams et al. (2003) conducted a study to look at the factor structure, personality correlates, and the prediction of distress using the Coping Inventory for Stressful Situations ([CIIS], Endler & Parker, 1990, as cited in McWilliams et al., 2003). The authors indicated that they used the CIIS because they view other measures as psychometrically weak. The sample in the study consisted of 298 patients with Major Depressive Disorder, which was assessed by a psychiatrist and the Beck Depression Inventory (BDI). They found that task-oriented and social coping were associated negatively with depression, emotion oriented coping was associated positively with depression, and distraction was not correlated with depression.

Aldwin (2007) found that from all the studies, we can conclude that, “the relationship between coping strategies and psychological symptoms is highly complex, involving a number of theoretical as well and methodological issues” (p. 193). He continues to state that there may be confounding factors and variables amongst coping measures and outcomes and it is very critical that mental health researchers and professionals develop studies that eliminate these confounds.

Religious Beliefs as Coping

“Religious coping is how the individual makes use of religion to understand and deal with stress” (Puffer, Watt, Sikkema, Ogwang-Odhiambo, & Broverman, 2012, p.2).

Psychologist Akinsulure-Smith (2014), who works with African IDP’s and refugee women, speaks to the importance of religious beliefs and prayer as a healing practice amongst Africa women who have survived violence. The cultural framework in east Africa is such that religion and prayer serve as a way to address mental health problems. Pargament, Koenig, and Perez (2000) sought to answer the question, “what is it about religious coping that affects the outcomes of major life stressors” (p. 551).

Religious beliefs and a sense of truth and purpose rooted in the family, the church, and the community provide strength to women living in eastern Congo. Therefore it is relevant to address the belief system as a coping factor. Christianity is the majority religion in DRC as 96% of the population identify as Christians. Religion is an important aspect of Congolese culture and is embedded in many cultural norms and beliefs.

Pargament, Koenig, and Perez (2000) studied religious coping in-depth and report that among minorities, elderly, and any individual facing a crisis, religion was cited more frequently used as a coping resource. They believe that religion has the ability to offer individuals and communities with diverse methods of coping during a range of stressful situations. Pargament, Koenig, and Perez (2000) define religious coping in five basic religious functions: religious methods of coping to find meaning, religious methods as coping to gain control, religious methods of coping to gain comfort and closeness to God, religious methods of coping to gain intimacy with others and closeness to God, and religious methods

of coping to achieve a life transformation.

Khawaja, White, Schweitzer and Greenslade (2008) conducted research on 28 Sudanese refugees and found that religious beliefs and practices provided a number of coping strategies for this population and was the most commonly identified coping strategy. Halcon and colleagues (as cited in Khawaja et al., 2008) found that between 50-70% of refugees living in Ethiopia and Somalia used prayer to lessen their symptoms of sadness. Colic-Peisker and Tilbury (2003) suggest that refugees coping strategies can be categorized into active and passive styles. Some refugees may adopt active coping and stand up against the opposition leaders when others may be avoidant and feel that coping is out of their control.

Khawaja et al. (2008) found that the use of religion, social support, reframing, and focusing on the future were the most commonly used coping strategies. Participants expressed that they used religion as a coping strategy during the transition period, which is defined as the time following resettlement to their new home. They reported praying to God to improve their current situation and their future.

Eiroá Orosa, Brune, Huter, Fischer-Ortman and Haasen (2011) looked at belief systems as coping factors for traumatic experiences among refugee males and females from Ex-Yugoslavia, Kurdistan, Chechnya, and Africa. They found in previous studies conducted on the religious beliefs and coping that people were able to manage their trauma when they had a firm belief system, as defined by political ideology or religiousness of central importance in the person's life (Brune, 1996, as cited in Eiroá Orosa et al., 2011). These earlier findings were confirmed in their study.

Relational Cultural Theory

The relevancy of relational cultural theory (RCT) to this current research stems from the importance of social-supported approach-oriented coping as a means for stress reduction in this paper's population of Congolese female IDPs. In a study done on Sudanese refugees, social support networks were the second highest used coping strategies, and participants reported that, "during times of difficulty they discussed problems and received material support for members of their social networks, a range of individuals such as friends, family, and neighbors" (Khawaja et al., 2008, p.492). Social support, according to Lazarus and Folkman, is an external resource and people will appraise their resources when they encounter or experience stress (Chao, 2011).

RCT, a feminist therapeutic approach, was developed out of Jean Baker Miller's book (1976) *Towards a New Psychology of Women* (Comstock, Hammer, Strentzsch, Cannon, Parsons, Salazar, 2008). Miller, who was a feminist theorist and psychiatrist, developed RCT through the Stone Center at Wesley College, along with Judith Jordan, Janet Surrey, and lastly Irene Stiver. RCT was developed to fill a gap that was seen by the aforementioned theorists, a gap in traditional theoretical models that emphasized humanity's movement toward self-sufficiency, independence, and separation (Jordan, 2001). The basic tenant of RCT is that people throughout their lifespan develop more fully through connections with others (Duffey & Somody, 2011).

According to Miller, these traditional theories followed Freud's belief, "that relationships were secondary to the satisfaction of primary drives, and protection against the surrounding environment is more important than creating connection with one's

environment” (Jordan, 2001, p.93). RCT was created from the understanding that women, people of color and devalued cultural groups were being misunderstood and misrepresented in traditional theoretical models that reflect Eurocentric cultural bias (Jordan, 2001; Comstock et al. (2008). While RCT was initially created to focus on women, people of color and devalued cultural groups, RCT has evolved towards providing a better understanding of boarder privilege imbalances (Duffey & Somody, 2011).

RCT offers, an alternative theory to traditional Western theories that were built on the expectation that people are meant to move towards autonomy and separation of one another throughout the lifespan. The theoretical roots from which RCT emanated are relevant to the cultural construct that exists in the DRC, connectedness and growth-fostering relationships. Jordan (1997) concludes that even though people have a sense of self, it is in fact not separated from their interactions and relationships with others. In the DRC community, family and the shared experience of others is the glue that holds the society together. People function in systems, well exemplified by this African proverb: “If you want to go quickly, go alone, if you want to go far, go together”.

Since the war that started in the 1990’s, these connections and social systems have been shattered, causing isolation, dissociations, and illness among men, women and children. RCT posits that healing takes place by mutually empathy and growth-fostering relationships. Although this theory was developed in conditions that are very different from those in Sub-Saharan Africa, RCT posits that chronic disconnections lead to isolation and ongoing disempowerment (Miller & Stiver, 1997). RCT focuses on individual disconnection as well as cultural marginalization (Stiver, Rosen, Surrey, & Baker, 2008). DRC is a country that has

been plagued by disempowerment and war, therefore relationship connectedness and community building is a likely healing mechanism moving them towards wellbeing.

Banks (2006) writes that RCT is a theory that suggests that humans are continually growing and developing within and towards relationships. Being in isolation is the root cause for human suffering and the purpose of RCT is to move closer to connection to find healing. Pathology of distress is a result of disconnections, oppression, shame, and isolation. RCT does not characterize mental illness as a disease or weakness, but rather a symptom of being out of connection.

The overarching premise of RCT focuses on identifying and increasing the number of growth fostering relationships so as to bring people back into healing connections. This allows people to more fully connect not only with themselves, but also to connect more authentically and without shame in relationships (Jordan, 2001).

Jordan summarizes eight RCT core ideas that were developed by the original theorists. The therapist utilizing RCT must employ these ideas to successfully guide a client through RCT therapy (as cited in Duffey & Somody, 2011):

1. People grow through and toward relationship throughout the lifespan.
2. Movement towards mutuality, rather than movement toward separation, characterizes mature functioning.
3. Relational differentiation and elaboration characterize growth.
4. Mutual empathy and mutual empowerment are at the core of growth fostering relationships.
5. In growth-fostering relationships, all people contribute and grow or benefit;

development is not a one-way street.

6. Therapy relationships are characterized by a special kind of mutuality.
7. Mutual empathy is the vehicle for change in therapy.
8. Real engagement and therapeutic authenticity are necessary for the development of mutual empathy.

Jordan (2000, p.1007) adds that, “cultural issues as well as sociopolitical forces are central to people’s functioning.

These key RCT constructs and ideas are defined by viewing relational skills as strength rather than weakness, which is inconsistent with traditional theories (Ruiz, 2011). The relational constructs that are a pivotal part of therapy in RCT include: mutual empathy and empowerment, connections, condemned isolation, the central relational paradox, and power over dynamics (Ruiz, 2011).

Mutual empathy occurs when the therapist is authentic, engaged, affected, and shows value towards the client/s. This mutual empathy is seen, known, and felt by the client/s as the therapist is active, compassionate, and expressive in session (Jordan, 2001). As a result of the mutual empathy, empowerment is fostered and the client’s self-worth increases through the therapist’s ability to model a growth fostering relationship with the client/s. The goal of mutual empathy is to help clients develop empathy for themselves as well as others (Jordan, 2001). Research conducted by Liang, Tracy, Taylor, and Williams (2002) conclude that mentoring relationships that were built on authenticity, engagement, and empowerment, predicted higher self-esteem in women.

Relational awareness is the process of moving through connections, through

disconnections, and into new connections with others and having the intuitiveness and authenticity to resist relationships that are disconnected and not mutually empathetic (Comstock et al., 2008). Miller (as cited in Comstock et al., 2008, p.282) refers to the “five good things” that must occur in when you are in connection in a relationship, if these five things are not occurring than it is described as being disconnected:

1. Sense of Zest or Energy
2. Increased Sense of Worth
3. Clarity: Increased knowledge of oneself and the other person in the relationship
4. Productivity: Ability and motivation to take action both in the relationship and outside of it
5. Desire for more Connection: In reaction to satisfaction of relational experience

Condemned isolation is the idea that when a culture, group or individual experiences repeated disconnections it will inevitably lead to a feeling of shame and powerlessness when attempting to make connections with others (Ruiz, 2011). Miller and Stiver (as cited in Comstock et al., 2008, p. 282) summarize “that condemned isolation is reinforced when individuals from marginalized and devalued groups, who routinely encounter the myth of meritocracy, end up primarily blaming themselves for the personal failures that are often linked to factors of broader cultural context”.

Condemned isolation and the feeling of shame over time leads to the central relational paradox. One of the main constructs in RCT is that over time people develop emotional walls that protect themselves from hurt and rejection in relationships. They become

inauthentic, and as a result they perpetuate the cycle of disconnection because they are being driven by shame and self blame (Duffey & Somody, 2011). Even though people naturally crave connection the central relational paradox explains that people will move farther away and build strategies to avoid connections due to feeling vulnerability and negative relational images that were formed by passed attempts to engage (Comstock, et al., 2008).

Lastly, power over dynamics as described by Miller and Stiver (1997) is a type of disconnection that takes place when individuals or the dominant cultural group holds and uses its power over another. This occurs in patriarchal societies and to any group that is marginalized or oppressed by race, sexual orientation, religion, and ethnicity. Ruiz (2011) summarizes that when the dominant group uses power and corruption and societies and cultural groups are built on this premise of power over another, no relationship can exist in connection.

Even though the core constructs and tenets of RCT are more complex, than they initially appear, the theory is one that provides the clinician, student, or professional with a clear and comprehensive theoretical and historical background-underpinned by an in-depth explanation and guidelines for application. Frey (2013) summarized that, “RCT does not detail a list of specific techniques for implementing the framework, but instead provides an orienting rationale and structure for how relational tools can be applied” (p.179). Although RCT is not technique driven, counselors can use creativity and innovation. Jordan (2010) summarizes that, “RCT therapy is largely based on a change in attitude and understanding rather than a set of techniques” (as cited in Duffey & Somoday, 2011, p.232).

The relational tools that the RCT therapists utilize are responsiveness, closeness,

mutual empathy, authentic participation, meaningful disclosure, and activeness. As a theory that was built out of a feminist perspective, RCT posits that the therapist should stand in a position of engagement and lead the client/s to a “felt sense of self” (Jordan, 1997, p. 15). The felt sense of self grows through and by mutual and authentic connections that are practiced in therapy. It is clearly stated that the primary goal of relational-cultural therapy is to “bring people back into healing connections” through relationship resilience, and doing so by increasing the number of growth fostering relationships while moving away from isolation (Jordan, 2001, p. 97). RCT organizes the basic principles and assumptions by breaking down the eight core tenets, the five good things that result from growth fostering relationships, and the five paradigm shifts that must occur for one to gain relationship resilience.

Furthermore, RCT explains the key constructs that clients, societies and marginalized groups experience when disconnected and explains in detail how each came to be: the central relational paradox, negative relational images, power dynamics, condemned isolation, and strategies of disconnection. As the client/s are moving out of disconnection they develop and foster resilience, authenticity, mutual empathy, relational competence, and self-empathy for themselves and others.

RCT was born out of Jean Baker Millers book, *Towards a New Psychology of Women*, as a feminist therapeutic approach that was initially created to understand the suffering of women. The theorist’s impetus for the creation of RCT came from the recognition that traditional psychodynamic models and theories of development misunderstood and misrepresented women and only focused on autonomy. Carl Gilligan, a major contributor to RCT, researched issues associated with the difference between females

and males oral judgments. Gilligan notes that, “the disparity between women’s experience and the representation of human development, noted throughout psychological literature, has generally seen to signify a problem in women’s development” (as cited in Jordan, 2011, p.94).

Even though RCT was a movement rooted in traditional psychodynamic models and approaches, the theory is noticeably different, as summarized by Frey (2013), “therapeutic intervention is focused on affect and emotional expression, interpersonal relations, and identification of traumatic and/or troubling life experiences and process” (p. 178).

Similarly, RCT builds upon both Adlerian Psychology and Erik Erikson’s model of development. Adlerian psychology emphasized the importance of love and belonging as central to a person’s overall well-being. Comstock et al. (2008) outline the Eriksonian construct of “homonymy,” described by Erikson “as children’s ability to rearrange and expand their relational circles based on their individual and developmental needs” (p. 281).

RCT developed out of feminist theory but has been expanded to include social justice and multicultural principles of diversity. RCT now incorporates multicultural and social justice competencies by looking at the impact of oppression, power inequalities, marginalization, and social stratification across cultures and gender (Frey, 2013). “RCT takes into account these sociopolitical and relational aspects while offering a paradigm to support client growth” (Duffey & Somody, 2011, p.281).

Stiver et al. (2010) further summarize RCT, positing that when “cultures are built on the classification of race, gender, class, etc.,” (p.27), they create a whole new way for thinking and acting and this leads to serious societal disconnection. Comstock et al. (2008),

outline that societal disconnection, racism, cultural oppression, and social injustices lead to commended isolation and the “ongoing disempowerment of people from oppressed groups” (p.282). Miller and Stiver (1997) describe cultural disconnections experienced by people as the feeling of “being locked out of the possibility of human connections” (p.72).

Even though RCT was originally developed to work with women, it has been expanded to explain how men’s identity is shaped by the social and cultural constructs placed on them. In societies where patriarchal privileges exist; RCT posits that men’s self-esteem and self-worth are defined by competition and comparisons. These sex role standards get in the way of men developing healthy authentic relationship, which is pivotal in RCT (Frey, 2013).

Given the DRC has experienced over 16 years of war, violence and mass rape, the need for adequate culturally competent mental health services is a serious and pressing matter. As a result of this pervasive violence, both females and males are living in disconnection and have lost their trust and faith in one another. Psychotherapy was not developed in Africa and conditions are vastly different than in the western world. Therefore, it is critical for a model of therapy to be used that has the capacity to understand cultural nuances and differences. Ruiz (2011) summarized that RCT can provide an understanding of gender specific hardships, including sexual gender-based violence, domestic violence, and traditional gender based hierarchies that place males in the position of power above women. These gender specific hardships are consistent with what currently exists throughout the DRC.

Banks (2006) explains that when individuals and communities experience trauma,

they feel vulnerable, shameful, a sense of isolation, and may develop symptoms of PTSD. Isolation is viewed as the primary source of suffering for all human beings. RCT outcome research has proven that psychotherapy in community based settings have improved self-silencing, self-esteem and psychological well-being (Frey, 2013).

In sub-Saharan Africa, family and community ties are strong (and resilient?), based on powerful religious beliefs and a sense of truth and purpose rooted in the family, the church, and the community. Using RCT as a model for mental health care in the DRC can help individuals, communities and cultural groups move away from shame and isolation, systematically guiding them to rediscover what it means to be in healthy growth-fostering relationship.

Synthesis

Past research conducted in the past on mental health outcomes and the relationship to coping strategies is sparse. Bolton et al. (2003) is a pioneer in research looking at different methods of psychotherapy to lessen depression-like symptoms. To date Bolton et al. (2003) has not conducted research on the relationship between mental health factors and other descriptive variables in east African populations. Moreover, Mukwege et al., (2011) conducted a research study to determine the experiences of women who had been affected by the ongoing war and outlines the overwhelming need for mental health services.

Research conducted on coping strategies and mental health factors suggests that there is still a lack of concrete evidence-based research, especially done in conflict zones in east Africa. Research does suggest that religious coping is salient and culturally significant among African populations.

This study will provide valuable knowledge and add to the understanding of the effects of living in conflict and displacement. In addition, this study aims to move away from western psychology and towards an understanding of women living in a collectivist society that have been marginalized due to cultural norms. RCT posits that mental health symptoms are largely experienced because of lack of connections to others, the culture, and the community. In Bukavu, where this study takes place, IDPs have been uprooted from their homes and forced to live in less than ideal living conditions. It is a perfect social and cultural setting through which to test RTC and its potential to support and lift a marginalized, often misunderstood and underserved population.

With a lucid understanding of the relationship between coping strategies and mental health factors, more culturally sensitive mental health treatments can be developed and implemented. In addition, results of the current study can serve as a firm reference foundation for follow-on research and program development.

CHAPTER 3

METHODS

The main goal of this study is to obtain a better understanding of the coping strategies of Congolese women, which are expressed by cognitive and behavioral efforts to manage difficult external and internal demands (Padyab, Ghazinour, & Richter 2013). Moreover, looking at the relationship between coping strategies and mental health factors will aid in providing a richer and more in-depth understanding of how this population of women manages stress through coping strategies. The bulk of published research focused on Congolese women looks at treatment efficacy and not coping skill strategies in relation to mental health factors. This research will generate insight and knowledge that will improve mental health practice and inform public policy through a better understanding of the coping strategies of female IDP's.

In order to accomplish this goal of providing insight into the relationship of coping strategies and mental health factors in Congolese IDPs, an exploratory descriptive canonical correlation analysis is utilized. Coping strategies and mental health factors will be measured and analyzed using the statistical program, SAS 9.4.

It is estimated that 2.6 million Congolese have been internally displaced over the past two decades, creating a serious and long-term humanitarian crisis. Refugee International's summarizes that unlike other conflict affected countries, the vast majority of people in DRC do not live in official camps. In Bukavu specifically, many IDPs have set up make-shift residents in Essence, a Bukavu neighborhood, and by building rag tag shacks in this densely populated, crowded area.

The research design of this study is created to address the following research questions:

1. What are the relationships between individual coping strategies and mental health factors?
2. What are the relationships between sets of coping strategies and mental health factors?

Research Design

The present study utilizes an exploratory descriptive design. Creswell (2014) summarizes that the purpose of an exploratory descriptive design is to provide insight, understanding, and new knowledge on a topic that has not been previously studied. “Descriptive research provides an accurate account of characteristics of a particular individual, event, or group in real life situations” (Polit & Hungler, 1999, p.189). This current study will be conducted in a natural setting and strives to develop new knowledge on the topic of the relationship between mental health factors and coping strategies. In addition, the purpose of this research design is to determine the relationship between two factors and inform future research.

Data were collected from participants using the Hopkins Symptom Checklist (HSCL-25), the Harvard Trauma Questionnaire (HTQ), and the COPE inventory. All three instruments are normally used as self-reporting assessments, but because most women are illiterate in the region a native Kiswahili speaker who had been previously trained on conducting clinical assessments gave the participants each assessment verbally in Kiswahili.

Participants

Participants for this study consisted of 50 Congolese women IDPs between the ages of 18-60. An IDP is a person who has been forced to flee his or her home but remains within country borders. The participants in this study ranged in time since resettlement from 1 to 14 years. The women all resided in Bukavu, DRC in South Kivu at the time of the assessment. The participants were originally from different regions in North and South Kivu provinces in the eastern part of DRC. All research participants are native Kiswahili speakers.

Eligibility criteria included being internally displaced due to the ongoing conflict in the DRC since 1994. Participants were members of a local church in Bukavu, the CAPAC (Pentecostal Church in Central Africa) church that is located in an area of Bukavu called Essence, the region where IDPs have resettled. A non-probability convenience sampling approach was utilized, as each woman was identified by CEPAC church as members of their congregation and previously internally displaced.

Table 1

Demographic Statistics

Measure	Obs.	M	SD	Range
Age	50	32.74	9.51	18-60
Years Since Resettlement	50	6.94	6.15	1-14
Number of Children	50	4.10	1.67	1-11

Procedure

Participants were chosen for the study based on the following eligibility criteria: must be over the age of 18; resettled to Bukavu in the last six years; no history of severe psychological concerns or hospitalization. Of the 90 women who attended the initial meeting, 50 were asked to be participants in the study. Each woman was given a date and time to return to the CAPAC church to be interviewed. Women were interviewed over the following weeks in a private room with a sound machine to ensure confidentiality and privacy. The consent form and questionnaires (HSCL-25, HTQ (part IV), COPE, and the background information) were read aloud to illiterate by a trained Congolese native research assistant. In addition, a diagram that depicted the varying degrees of answer options on the Likert scale was used as a guiding example.

The research was conducted in Bukavu, DRC in December 2014. Packets given to each research participant included the initial consent form, a demographic information form, the HSCL-25, the HTQ (part IV), and the COPE inventory. In terms of demographics, participants reported time since resettlement in Bukavu, number of children, and age.

The 50 Congolese women, ages 18-60, were recruited from the CAPAC church in Essence (a district located in Bukavu). The local pastor of the church asked 50 women, who were interested in being part of the study, to come to the CAPAC church on Saturday at nine in the morning.

After being provided information on the purpose of the study, what participation entailed, and the rights of the participants, women gave their verbal and handwritten consent. If they were unable to write their name, their fingerprints were taken. Verbal interviews were

conducted at the CAPAC church after basic background demographic and social information was taken.

Instruments

All three instruments were translated into Kiswahili and back translated to English by native Kiswahili speakers. Each item was examined to determine face validity and conceptual meaning in the Kiswahili version.

1. Harvard Trauma Questionnaire ([HTQ]; Mollica & Caspi-Yavin, 1991):

The Kiswahili version was utilized to collect data on the level of PTSD. The instrument was built to evaluate psychological impact in inter-cultural context (Fouchier, Blanchet, Hopkins, Bui, Ait-Auodia, & Jehel, 2012). The HTQ has been shown to be effective in evaluating symptoms of PTSD and the psychological impact of resettlement in refugee populations worldwide. The Kiswahili version was professionally translated for a study done in Tanzania by Watt, Wilson, Joseph, Masenga, McFarlane, Oneko, and colleagues (2014) out of Duke University.

The HTQ consists of four parts, Part I assesses 17 traumatic life events ranging from “lack of food or water” to “rape” and “torture”. These events are rated on a 4- point scale: "Experienced," "Witnessed," "Heard about it," or "No." Part II asks the respondent to describe the most traumatic experience or event they have experienced during their refugee experience. Part III assesses likelihood of head injury. Part IV includes 30 trauma symptoms rated on a 4-point Likert response scale anchored from 1 (Not at all) to 4 (Extremely). The first 16 items such as “recurrent thoughts or memories of the most hurtful or terrifying events” or “feeling as though the event is happening again” attempt to assess the accepted

symptoms of PTSD diagnosis (Part 4 – PTSD). The following 24 items, named by the authors “refugee-specific”, lean more toward the impact that the traumatic experiences may have had on the subject's perception of his/her daily lives (Part 4 – Functioning) (Mollica & Caspi-Yavin, 1991).

Renner, Laireiter and Maier (2012) summarizes that the HTQ was developed by Mollica (HTQ, Mollica & Caspi-Yavin, 1991) specifically for non-western populations. Renner et al. (2007) recognize that not all African countries are homogeneous and therefore conducted a study on the validity of the instrument with different populations throughout Africa and the Middle East. The study done on the internal consistency of the HTQ by Renner et al. (2007) in east Africa, with participants ranging in age from 18-63, found HTQ to be highly reliable. The Cronbach's alpha for the entire scale was reported at ($\alpha=.90$) for the east African population.

Moreover, a study was completed by De Fouchier et al. (2012) on the validation of the HTQ among survivors of torture and sexual violence in sub-Saharan Africa. The research was completed on $n=52$ with an average participant age of 36.6. The coefficient $\alpha=0.90$ for the PTSD subscale, $\alpha=0.93$ for the self-perception of functioning subscale, and $\alpha=0.93$ for the entire scale ($\alpha=0.96$). The cut-off score for this population was 2.5, meaning that if a participant scored 2.5 or above they would be considered symptomatic.

For this current study, only data from part IV of the HTQ were collected making up the PTSD subscale. Part IV includes 30 trauma symptoms rated on a 4-point Likert-type response scale anchored from 1 (Not at all) to 4 (Extremely). A copy of the questionnaire is in Appendix C.

2. The Hopkins Symptom Checklist ([HSCL]; Hesbacher, Rickels, & Morris et al., 1980):

The Kiswahili version of the HSCL was utilized to collect data on the anxiety and depression levels of the participants. The HSCL has been shown to be effective in evaluating symptoms of anxiety and depression in refugees. The Swahili version was professionally translated for a study done in Tanzania by Watt, Wilson, Joseph, Masenga, McFarlane, Oneko and colleagues (2014) out of Duke University.

The participants were asked to complete the HSCL-25, which is a symptom inventory that measures symptoms (levels?) of anxiety and depression. It consists of 25 items: Part I of the HSCL-25 has 10 items for anxiety symptoms; Part II has 15 items for depression symptoms. The scale for each question includes four categories of response (“Not at all,” “A little,” “Quite a bit,” “Extremely,” rated 1 to 4, respectively). Two scores are calculated from the 25 items: the depression score is the average of the 15 depression items, and the anxiety subscale is the average of the 10 anxiety related questions.

Kaaya, Fawzi, Mbwambo, Lee, Msamanga and Fawzi (2002) conducted a study in Tanzania looking at the validity of the Kiswahili version of the HSCL-25 among females ages 15-60. They estimated that 73-88% of females met the criteria for major depressive disorder based on a cut-off score of 1.75. Kaaya et al. (2002) reported the internal consistency of the HSCL-25 as reasonable with an overall Cronbach’s alpha of ($\alpha= 0.93$) and ($\alpha =0.9$) and ($\alpha =0.85$) for the depression and anxiety scales. A copy of the questionnaire is in Appendix D.

3. The COPE inventory (Carver, Scheier & Weintraub, 1998).

The Swahili version of the Cope inventory was utilized to collect data on the coping strategies of the participants. The COPE inventory has been shown to be effective in assessing coping strategies or processes (Aldwin, 2007). The researcher translated the COPE inventory to Kiswahili and back translated into English with the help of a native Congolese research assistant. Each item was examined to determine face validity and conceptual meaning in the Kiswahili version.

The COPE Inventory ([COPE]; Carver et al. 1989) The COPE is a 60-item survey that measures 15 coping strategies. They include: (a) Active Coping, (b) Planning, (c) Suppression of Competing Activities, (d) Restraint Coping, (e) Seeking Social Support--Instrumental, (f) Seeking Social Support--Emotional, (g) Focus on and Venting of Emotions, (h) Behavioral Disengagement, (i) Mental Disengagement, (j) Positive Reinterpretation and Growth, (k) Denial, (l) Acceptance, (m) Turning to Religion, (n) Alcohol-Drug Disengagement, and (o) Humor. The scale for each COPE question includes four categories of response (“I usually don’t do this at all,” “I usually do this a little bit,” “I usually do this a medium amount,” “I usually do this a lot,” rated 1 to 4, respectively). The 15 scales of the COPE are further broken down into: (1) self-sufficient coping, (2) avoidant coping, (3) socially supported coping (Litman, 2006). For the purpose of this research the 15 subscales will be analyzed.

Clark, Bormann, Cropanzano, and James (1995) conducted a study to investigate the construct validity of three coping scales: the Coping Strategy Indicator ([CSI]; Amirkhan, 1990); the Ways of Coping-Revised ([WOC]; Folkman & Lazarus, 1985); and the COPE

Inventory ([COPE]; Carver et al., 1989). The COPE was created under the assumption that an individual's coping is stable rather than a situation-specific adaption (Clark et al., 1995). Three scales across the measures were evaluated for relationships: Problem-Solving; Seeking Social Support; and Avoidance. The analysis of their results indicated, "the three measures contain factors which tap similar constructs showing high levels of congruence" (Clark et al., 1995, p. 446). Upon examination of the COPE Inventory, Clark, Bormann, Cropanzano and James found that the 15-factor structure was supported, and fit better than the alternative model with the three-factor structure: Active Coping and Planning; Seeking Emotional Social Support; and Seeking Instrumental Social Support (Clark et al., 2005). A copy of the questionnaire is in Appendix B.

4. Informational Questionnaire.

The informational questionnaire was utilized to gather informative information from each participant in the study. Although, in this current study the data collected from the informational questionnaire, was not analyzed. Four questions were asked to each participant: 1. How old are you, 2. How many years has it been since you resettled in Buakvu, DRC, 3. How many children do you have. A copy of the questionnaire is in Appendix A.

Analysis

A Canonical Correlation Analysis (CCA) through SAS software was performed to understand the relationship between mental health factors and coping strategies. The first variable set, the dependent variable, is coping strategies defined by the COPE inventory. The second variable set, the independent variable, is mental health factors defined by anxiety,

depression, and PTSD which were measured using the HSCL-25 and the HTQ (part IV).

Canonical Correlation Analysis is an established research method that is used to discover linear/non-linear relationships among sets of multiple dependent variables and multiple independent variables (Sakar, Kursun & Gurgun, 2013; Hair, Anderson, Tatham & Black, 1998). Hair et al. (1998) summarize the objective of CCA as determining, “the nature of whatever relationship exists between the sets of dependent and independent variables, generally by measuring the relative contribution of each variable to the canonical functions (relationships) that are extracted” (p. 205). CCA was performed between a set of mental health factors and a set of coping strategies. The first research question, “What are the relationships between individual coping strategies and mental health factors?” was addressed by examining Pearson correlations among individual coping strategies. The second research question, “What are the relationships between sets of coping strategies and mental health factors?” was addressed by the canonical correlation and the canonical variables of each set of coping strategies (self-sufficient problem-focused coping, avoidant coping, socially supported coping, and self-sufficient emotion-focused coping).

The number of canonical correlations in the analysis is determined by the lesser number of variables in the two sets. Masters and Wallston (2005) recommend examining the Pearson’s correlation to determine statistical significance. Significant values are then further analyzed by looking at the canonical coefficients and the canonical variate-variable correlations. Standardized coefficients and canonical variate-variable correlations above .30 are considered significant for the interpretive process (Masters & Wallston, 2005).

CHAPTER 4

RESULTS

This chapter includes results of data analyses between mental health factors and coping strategies. Descriptive statistics are presented first, followed by the results of the Pearson correlation analysis between individual coping strategies and mental health factors. Next, a Pearson correlation analysis is presented between the individual COPE inventory coping strategies, answering the first research question. Data is presented for the canonical correlation analysis, analyzing the relationship between variable sets. The coping strategy variate set, the dependent variable, is measured by fifteen individual coping sets from the COPE inventory broken down further into four sets of coping strategies: self sufficient problem-focused (planning, active and suppression), avoidant coping (behavioral disengagement, denial, substance use and mental disengagement), socially supported coping (emotional social support, instrumental social support and venting) and, self sufficient emotion-focused coping (restraint, positive reinterpretation, humor, and religion). The mental health factors variate set, the independent variable, is measured by depression (HSCL-depression), anxiety (HSCL-anxiety), and PTSD (HTQ). The study's findings are guided by each research question below:

1. What are the relationships between individual coping strategies and mental health factors?
2. What are the relationships between sets of coping strategies and mental health factors?

Table 2

Descriptive Statistics

Measure	Obs.	M	SD	Range
HTQ	50	2.65	0.51	1.25-3.94
HSCL-Anxiety	50	2.58	0.572	1.24-3.6
HSCL-Depression				
<u>Self-Sufficient Problem Focused</u>				
Active	50	2.28	0.61	1.5-3.75
Suppression	50	2.12	0.59	1-3.5
Planning	50	2.43	0.72	1-3.75
<u>Avodiant Coping</u>				
Behavioral Disengagement	50	1.98	0.58	1-3
Denial	50	1.88	0.61	1-3
Substance	50	1.12	0.24	1-1.75
Mental Disengagement	50	2.31	0.69	1-4
<u>Socially Supported Coping</u>				
Emotional Social Support	50	1.95	0.72	1-3.75
Instrumental Social Support	50	2.22	0.79	1-4
Venting	50	1.45	0.52	1-3
<u>Self Sufficent Emotion-Focused Coping</u>				
Restraint	50	2.27	0.70	1-4
Positive Reinterpretation	50	2.72	0.72	1.75-4
Acceptance	50	1.99	0.67	1-3
Humor	50	1.72	0.54	1-3
Religion	50	3.49	0.48	2.75-4

Research question 1, “What are the relationships between individual coping strategies and mental health factors”. Results of analyses corresponding to this Research Question are provided in Table 3 and Table 4. Table 3 presents the results of the Pearson correlation for

individual coping strategies and mental health factors. Table 4 presents the Pearson correlation matrix for the individual coping strategies.

Table 3

Correlations for Individual Coping Strategies and Mental Health Factors

Measure	HTQ	HSCL-Anxiety	HSCL-Depression
Active	-0.51***	-0.54***	-0.48***
Suppression	0.37***	0.35**	0.52***
Planning	-0.30***	-0.22*	-0.27*
Behavioral Disengagement	0.45***	0.44***	0.41**
Denial	0.33*	0.44**	0.30*
Substance Use	0.08	0.09	-0.12
Mental Disengagement	0.57***	0.39***	0.41***
Emotional Social Support	-0.44***	-0.44***	-0.25
Instrumental Social Support	-0.50***	-0.40**	-0.48***
Venting	0.35**	0.36**	0.16
Restraint	0.44***	0.32*	0.28*
Positive Reinterpretation	-0.74***	-0.59***	-0.54***
Acceptance	0.30*	0.38**	0.51***
Humor	-0.28*	-0.26	-0.00
Religion	-0.18	-0.15	-0.30*

* $p < .05$, ** $p < .01$, *** $p < .001$

Summary of Correlation Findings

A correlational analysis was used to examine the relationship between the fifteen individual coping strategies assessed by using the COPE measurement and mental health factors (PTSD, anxiety, and depression). There was a significant correlation between active

coping and PTSD, $r = -.51, p < .001$. As active coping increased, symptoms of PTSD decreased significantly. Active coping consistently correlated in varying degrees with anxiety symptoms, $r = -.54, p < .001$ and depression symptoms $r = -0.48, p < .001$, accounting for approximately 30% and 23% of the variance respectively. This suggests that as active coping increased, symptoms of all three mental health factors decrease.

Suppression of competing activities as a coping strategy displayed a mild relationship with symptoms of PTSD and anxiety, but showed a strong association with symptoms of depression, $r = .52, p < .001$, that accounted for approximately 27% of the variance. This suggests that as suppression of competing activities is expressed as a coping strategy, symptoms of depression increase.

The use of behavioral disengagement as a coping strategy was positively correlated with symptoms of PTSD $r = .45, p < .001$, anxiety $r = .44, p < .001$, and depression, $r = .41, p < .001$, accounting for approximately 20%, 19% and 17% of the variance respectively. This suggests that as behavioral disengagement increased, symptoms of all three mental health factors also increased.

Mental disengagement was also linked to symptoms of PTSD $r = .57, p < .001$, anxiety $r = .39, p < .001$, and depression $r = .41, p < .001$, accounting for approximately 32%, 15% and 17% of the variance respectively. Mental disengagement was highly correlated with symptoms of PTSD and depression and moderately correlated with symptoms of anxiety. Participants that used mental disengagement as a coping strategy tend to show higher levels of PTSD and depression symptomology.

Seeking emotional social support was strongly negatively correlated with PTSD, $r = -.44$, $p < .001$, and anxiety $r = -.44$, $p < .001$, but yielded an insignificant correlation to depression symptoms. As participants sought emotional social support as a coping strategy, symptoms of PTSD and anxiety decreased. Similarly, there was a strong negative correlation with instrumental social support and PTSD, $r = -.50$, $p < .001$, anxiety, $r = -.40$, $p < .01$, and depression, $r = -.48$, $p < .001$, accounting for approximately 25%, 16% and 23% of the variance respectively. This suggests that when participants are seeking social support, symptoms of PTSD, anxiety, and depression are shown to decrease.

Finally there was a significant negative correlation between positive reinterpretation and PTSD, $r = -.74$, $p < .001$, anxiety, $r = -.59$, $p < .001$, and depression $r = -.54$, $p < .001$, accounting for approximately 54%, 35% and 29% of the variance respectively. This suggests that as positive reinterpretation is used as a coping strategy, symptoms on all three measures decrease.

It is important to note that religiosity and substance use did not yield strong or significant correlations with any of the mental health factors, suggesting that neither of these coping strategies was significant in the model. The full results for the individual coping strategies and mental health factors correlations are provided in Table 3.

Summary of the Correlation Matrix

A correlation analysis was performed to examine the relationship between individual coping strategies as seen in Table 4. Within the individual coping strategies there were few notable significant relationships. Behavioral disengagement was negatively correlated with active coping, $r = -.47$, $p < .001$, showing a strong association. Behavioral disengagement and

active coping displayed few associations with other variables except active coping and denial, $r = -.55, p < .001$, were negatively correlated. As participants used active coping strategies they were less likely to utilize denial and behavioral disengagement as a coping strategy to deal with stress.

There was a moderate relationship among active coping and planning $r = .38, p < .05$, suggesting that as participants engaged in active coping to remove the stressor, planning as a coping strategy increased as well as instrumental social support, $r = .38, p < .01$. It is important to note that individual coping strategies were not notably significant among one another, even if they were within the same subcategory.

Symptoms of PTSD demonstrated significant relationships with symptoms of anxiety and depression. The HTQ measure, $r = .71, p < .001$, was strongly positively correlated with the HSCL anxiety measure. The HTQ measure, $r = .60, p < .001$, was also positively correlated with the HSCL depression measure. Lastly, the HSCL depression measure, $r = .62, p < .001$, was positively correlated with the HSCL anxiety measure. This suggests that when a participant's symptoms of PTSD increase, their symptoms of anxiety and depression will also increase.

Table 4

Correlation Matrix for Individual Coping Strategies

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Active	---														
2. Suppression	-0.32*	---													
3. Planning	0.38*	-0.23	---												
4. Behavioral	-0.47***	0.29*	-0.32*	---											
5. Denial	-0.55***	0.94	-0.15	0.29*	---										
6. Substance	-0.10	-0.10	-0.19	0.31*	0.07	---									
7. Mental	-0.38**	0.11	-0.33*	0.15	0.25	0.08	---								
8. Emotional	0.20	-0.38**	-0.01	-0.16	-0.25	-0.16	-0.27	---							
9. Instrumental	0.38**	-0.35*	0.29*	-0.31*	-0.25	0.191	-0.36**	0.19	---						
10. Venting	-0.21	-0.01	-0.38**	0.28*	0.07	0.12	0.31*	-0.25	-0.34*	---					
11. Restraint	-0.24	0.04	-0.10	0.25	0.19	0.15	0.34*	-0.13	-0.19	0.38**	---				
12. Positive	-0.11	0.14	-0.17	-0.0	0.01	-0.7	0.23	-0.17	-0.07	0.13	-0.06	---			
13. Acceptance	0.02	0.34*	-0.01	0.22	0.27*	-0.17	0.28*	-0.27*	-0.23	0.02	0.05	0.15	---		
14. Humor	-0.02	-0.02	-0.06	-0.22	-0.20	-0.24	-0.16	0.37**	-0.08	-0.17	-0.25	0.08	-0.24	---	
15. Religion	-0.03	-0.27	0.27	-0.13	-0.08	0.25	-0.11	-0.05	0.36*	-0.03	0.03	0.01	-0.38**	0.16	---

$p < .05$, ** $p < .01$, *** $p < .001$

Canonical Correlation Results

Data analytic results corresponding to Research Question 2, “What are the relationships between sets of coping strategies and mental health factors”, are shown in Table 5 through Table 8. There are four canonical correlations that were run between the four sets of coping strategies: self-sufficient problem-focused (planning, active and suppression), avoidant coping (behavioral disengagement, denial, substance use and mental disengagement), socially supported coping (seeking emotional social support, seeking instrumental social support and venting) and, self sufficient emotion-focused coping (restraint, positive reinterpretation, humor, and religion) and the mental health factors: depression (HSCL-depression), anxiety (HSCL-anxiety), and PTSD (HTQ).

Table 5 presents the results of the first canonical correlation analysis for mental health factors (HTQ, HSL-Anxiety, and HSCL-Depression) and self-sufficient problem focused coping strategies, which include active coping, suppression (of competing activities), and planning coping. Wilk’s test of significance revealed a significant correlation in the first canonical correlation, $R_c = .67$, $F(9,107) = 3.82$, $p < .001$, Wilk’s $s_6 = .508$, $p < .001$. The variance is 45%, which is the portion of the mental health variate set explained by the self-sufficient problem focused coping variate set. The second canonical correlation revealed an insignificant correlation, $R_c = .24$, $F(4,90) = .85$, $p = .49$. Furthermore, the third canonical correlation also revealed an insignificant correlation, $R_c = .12$, $F(1,46) = .71$, $p = .40$.

The first canonical model shows that as active coping decreases, symptoms of PTSD, anxiety, and depression increase. This suggests that participants who use active coping have decreased symptoms on all mental health factor indicators. As suppression of competing

activities increases, symptoms of PTSD, anxiety, and depression also increase. Lastly, as levels of planning as a coping strategy decreases, symptoms on each mental health factor increase. This indicates that participants who use planning as a coping strategy have decreased symptoms on all mental health factor indicators.

Table 5

Correlations, Standardized Canonical Coefficients, Canonical Correlations, and R^2 between Self-Sufficient Problem Focused Coping and Mental Health Factors

	<u>First Canonical Variate</u>	
	Correlation	Coefficient
Coping Strategy Set: <u>Self Sufficient Problem Focused</u>		
Active	-0.57	-0.65
Suppression	0.50	0.52
Planning	-0.30	-0.09
Mental Health Set		
HTQ	0.55	0.29
HSCL-Anxiety	0.50	0.27
HSCL-Depression	0.61	0.57
Canonical correlation R_c	0.67	
R_c^2	0.45	

Table 6 presents the results of the first canonical correlation analysis for mental health factors (HTQ, HSL-Anxiety, and HSCL-Depression) and avoidant coping strategies, which include behavioral disengagement, denial, substance use, and mental disengagement.

Wilk's test of significance revealed a significant correlation in the first canonical correlation, $R_c = .72$, $F(12,114) = 3.99$, $p < .001$, Wilk's $\lambda = .39$, $p < .001$. The variance is 52%, which is the portion of the mental health variate set explained by the avoidant coping variate set. The second canonical correlation revealed an insignificant correlation, $R_c = .30$, $F(6,88) = 1.45$, $p = .20$. Furthermore, the third canonical correlation also revealed an insignificant correlation, $R_c = .30$, $F(2,45) = 2.19$, $p = .12$.

The first canonical model shows that as behavioral disengagement and mental disengagement increase, symptoms of PTSD increase significantly while symptoms of anxiety and depression only increasing slightly. Throughout the analysis, substance use has shown extremely low correlation with all mental health factors.

Table 6

Correlations, Standardized Canonical Coefficients, Canonical Correlations, and R^2 between Avoidant Coping and Mental Health Factors

<u>First Canonical Variate</u>		
	Correlation	Coefficient
<u>Coping Strategy: Avoidant</u>		
Behavioral		
Disengagement	0.54	0.92
Denial	0.21	0.35
Substance Use	- 0.05	-0.21
Mental		
Disengagement	0.64	0.92
Mental Health Set		
HTQ	0.67	1.30
HSCL-Anxiety	0.16	0.29
HSCL-Depression	0.28	0.62
Canonical correlation R_c	0.72	
R_c^2	0.52	

Table 7 presents the results of the first canonical correlation analysis for mental health factors (HTQ, HSL-Anxiety, and HSCL-Depression) and socially supported coping strategies, which include seeking emotional social support, seeking instrumental social support, and venting. Wilk's test of significance revealed a significant correlation in the first canonical correlation, $R_c = .68$, $F(1,107) = 3.62$, $p < .001$, Wilk's $\lambda = .52$, $p < .001$. The variance is 45%, which is the portion of the mental health variate set explained by the socially supported variate set. The second canonical correlation revealed an insignificant correlation, $R_c = .29$, $F(4,90) = 1.25$, $p = .29$. Furthermore, the third canonical correlation also revealed an insignificant correlation, $R_c = .14$, $F(1,46) = 0.92$, $p = .34$.

The first canonical model shows that as an individual seeks emotional social support and instrumental social support, symptoms of PTSD, anxiety, and depression also decreases. The most significant correlation is seen in symptoms of PTSD. Lastly, as venting increases, levels of mental health symptoms also increase among participants.

Table 7

Correlations, Standardized Canonical Coefficients, Canonical Correlations, and R^2 between Socially Supported Coping and Mental Health Factors

	<u>First Canonical Variate</u>	
	Correlation	Coefficient
<u>Coping Strategy: Socially Supported Coping</u>		
Emotional Social Support	-0.43	-0.49
Instrumental Social Support	-0.54	-0.69
Venting	0.33	0.15
<u>Mental Health Set</u>		
HTQ	0.62	0.80
HSCL-Anxiety	0.48	0.00
HSCL-Depression	0.49	0.28
Canonical correlation R_c	0.64	
R_c^2	0.41	

Table 8 presents the results of the first canonical correlation analysis for mental health factors (HTQ, HSL-Anxiety, and HSCL-Depression) and self-sufficient emotion-focused coping strategies, which include restraint, positive reinterpretation, humor, and religion. Wilk's test of significance revealed a significant correlation in the first canonical

correlation, $R_c = .83$, $F(15,116) = 5.65$, $p < .001$, Wilk's $\lambda = .22$, $p < .001$. The variance is 69%, which is the portion of the mental health variate set explained by the self-sufficient emotion-focused variate set. This model was the most significant among the four canonical correlation analyses in this study. The second canonical correlation revealed an insignificant correlation, $R_c = .50$, $F(8,86) = 1.98$, $p = .06$. Furthermore, the third canonical correlation also revealed an insignificant correlation, $R_c = .19$, $F(3,44) = 0.57$, $p = .63$.

The first canonical model shows that as restraint and acceptance increase, symptoms of PTSD, anxiety, and depression decrease, most notably PTSD. The most significant correlation in this model is between positive reinterpretation and mental health symptoms. As positive reinterpretation increases symptoms of PTSD, anxiety, and depression decrease. This suggests that as participants use positive reinterpretation as a coping strategy, they are less likely to experience symptomology of PTSD, anxiety, and depression. Lastly, humor and religion were mildly significant in this model. As humor and the use of religion as a coping strategy mildly decreased, symptoms of PTSD, anxiety and depression increased.

Table 8

Correlations, Standardized Canonical Coefficients, Canonical Correlations, and R^2 between Self Sufficient Emotion-Focused Coping and Mental Health Factors

<u>First Canonical Variate</u>		
	Correlation	Coefficient
Coping Strategy: <u>Self Sufficient Emotion-Focused</u>		
Restraint	0.42	0.32
Positive	-0.75	-0.76
Reinterpretation		
Acceptance	0.41	0.31
Humor	-0.21	0.04
Religion	-0.24	0.00
Mental Health Set		
HTQ	0.79	0.68
HSCL-Anxiety	0.66	0.10
HSCL-Depression	0.66	0.33
Canonical correlation R_c	0.83	
R_c^2	0.69	

Summary of Findings

This chapter delineated the results of findings for the two research questions addressed in this study. The first research question looked at individual coping strategies assessed by the COPE inventory in relationship to mental health factors. The Pearson's correlation matrix looked at individual coping strategies in relationship to mental health factors, and the second correlation matrix looked at the relationship between the fifteen coping strategies assessed by the COPE. Lastly, four canonical correlation models were presented to answer the second research question, which looked at the mental health variate

set in relationship to four subsets of coping response: self sufficient problem-focused (planning, active and suppression), avoidant coping (behavioral disengagement, denial, substance use and mental disengagement), socially supported coping (emotional social support, instrumental social support and venting) and, self sufficient emotion-focused coping (restraint, positive reinterpretation, humor, and religion).

Findings indicate that coping strategies in relationship to mental health factors can be understood to be a complex, varied construct. Coping is defined as “action-oriented and intrapsychic efforts to manage demands created by stressful events” (Taylor & Stanton, 2007). These results show patterns in the relationship between coping and mental health factors, especially symptoms of PTSD, anxiety, and depression. The patterns among coping strategies and mental health factors will be discussed in Chapter 5. In addition, the implications of the results, the limitations of the study and further research will be explored.

CHAPTER 5

DISCUSSION

This chapter summarizes the findings that address each of the two research questions. In conclusion, the limitations, challenges and implications of the study are discussed and direction for further research provided.

Overview of the Study

The main purpose of this study was to obtain a better understanding of the coping strategies of Congolese women and to identify and suggest culturally tailored treatment options. Coping strategies are expressed by cognitive and behavioral efforts to manage difficult external and internal demands (Padyab, Ghazinour & Richter 2013). Looking at the relationship between coping strategies and mental health factors will aid in providing a richer and more in-depth understanding of how this population of women manages stress and hardship through coping strategies. The following two research questions guided the study:

1. What are the relationships between individual coping strategies and mental health factors?
2. What are the relationships between sets of coping strategies and mental health factors?

The sample of 50 participants in the study was comprised of Congolese women IDPs between the ages of 18-60. The women all resided in Bukavu, DRC South Kivu at the time of the assessment. The participants were originally from regions in the North and South Kivu provinces of eastern DRC. All research participants are native Kiswahili speakers.

Summary of Findings

The findings in this current study are in that they lend to a deeper understanding into the lives of internally displaced women living in eastern Congo and suggest unique mental health approaches and interventions tailored to the cultural norms and experience of the region. To date no research has been conducted looking at coping strategies in relationship to mental health factors with this specific population or similar populations. This research serves as a catalyst and has the potential to inform further studies and provide direction for the expansion of mental health care in an area of the world that is in dire need. Before best practices can be developed, it is necessary to build an understanding of sociocultural history (Mollica, 2006) as well as trends in coping with stressors.

Research Findings and Interactions with Previous Research

The study results yielded useful information into the relationship between individual coping strategies measured by the COPE inventory, and mental health factors measured by the HTQ and the HSCL. This research contributes to a deeper understanding of how internally displaced women in DRC cope with the magnitude of stressors they experience. It also alludes to some culturally appropriate and effective intervention strategies that might be developed and employed to support their healing process.

Individual coping strategies and mental health factors. The first research question was answered by running a Pearson correlation amongst individual coping strategies and mental health factors. Amongst the individual coping responses, the highest score was the use of religion as a coping strategy, which yielded an average of 3.49 on a 4-point Likert scale. In the Pearson's correlation matrix, religion as a coping strategy was moderately

negatively correlated with depression, $r = -.30$. As the use of religious coping increased, symptoms of depression decreased amongst the participants. This is consistent with the limited amount of research presented in the literature. In a study conducted by O'Mahony, Donnelly, Bouchal and Este (2012) on the influence of refugee women coping with depression, results showed that religious beliefs lessened symptoms of depression and provided a sense of strength and identity .

The study results revealed no significant relationship between the use of religious coping and a participant's symptoms of PTSD and anxiety. These results are inconsistent with the studies examined in previous literature, which showed that religious coping was used as way to manage and lessen symptoms associated with trauma.

Moreover, in the individual correlation matrix, religious coping was moderately positively correlated with seeking social support for instrumental reasons, $r = .36$ and negatively correlated with acceptance, $r = -.38$. Thus, it appears that a relationship exists between individuals seeking instrumental social support as a coping strategy and the use of religion as a coping strategy. Seeking instrumental social support is a problem-focused strategy that involves outside assistance to deal with the stressor (Carver & Scheier, 1994). This study demonstrates that participants may seek social support in religious settings, which would be aligned with Congolese cultural norms, as attending church makes up a large part of an individual's social world outside the immediate family. Moreover, the relationship between acceptance and religious coping suggests that as religious coping increases, acceptance of the stressor decreases among individuals.

Consistent to the published research, the present study revealed that active coping, an adaptive coping strategy, had a strong negative correlation to all three measures of mental health (PTSD, $r=-.51$, anxiety, $r=-.54$, depression, $r=-.48$). Individuals who actively sought to remove the stressor had significantly lower levels of symptomology of mental health. These results are consistent with Kasi et al. (2012) study on coping mechanisms used by patients with symptoms of anxiety and depression. Furthermore, active coping yielded the most significant correlations in the individual correlation matrix. Notably, the present results showed that active coping yielded strong positive relationships to planning and seeking instrumental social support and moderate to strong relationships to the suppression of competing activities, behavioral disengagement, and denial.

Continuing to look at the correlations for individual coping strategies and mental health factors, there is a strong positive relationship between mental disengagement and the three mental health factors. Mental disengagement is a strategy involving the use of mental distractions and activities to distract an individual from thinking about the stressor, such as daydreaming, or escaping through television (Carver & Scheier, 1994). The correlation between mental disengagement at PTSD was $r= .57$, anxiety= $.39$, and depression= $.41$. This strong positive relationship means that when participants used distraction as a coping strategy, they experienced an increased amount of symptomology. This relationship is consistent with previous research, simply stating that individuals who report high levels of disengagement when coping with stressors in their life conjointly report increased levels depression and anxiety and negative psychological outcomes (Varni, Miller, McCuin & Solomon, 2012).

Confirming Liang et al. (2002) findings and the tenets of RCT, both seeking social support for emotional reasons and seeking social support for instrumental reasons yielded strong negative relationships with the three measures of mental health. Seeking social support for emotional reasons is getting moral support, sympathy and understanding (Carver & Scheier, 1994). Seeking social support for instrumental reasons is seeking help to solve a problem (Carr, 2011). RCT is a theory that suggests that humans are continually growing and developing within and towards relationships, and that being in isolation is the root cause for human suffering. The purpose of RCT is to move closer to connection to find healing (Banks, 2006). These findings suggest that as participants sought emotional social support or instrumental social support, symptoms of PTSD, anxiety, and depression decreased. Seeking social support appears to serve as a protective factor against negative psychological outcomes. Interestingly, in the individual coping strategy correlation matrix, seeking emotional support and seeking instrumental social support did not yield a significant relationship. This lack of relationship could be attributed to participants seeking social support, either for emotional reasons or instrumental reasons.

Lastly, positive interpretation showed a strong negative relationship to all three mental health factors. The correlation between the HTQ PTSD measure and positive interpretation was $r=-.74$, which is a very strong negative correlation. Positive interpretation is an emotion-focused strategy where the individual manages emotional distress rather than the stressor itself. These findings are consistent with Linley and Joseph (2004) research where they systematically reviewed 39 studies and found that positive change is found in 30-70% of trauma survivors when using positive interpretation amongst other coping strategies.

These results suggest the importance of teaching positive interpretation skills in both health clinics and mental health groups in order to cope effectively with past traumas and stressors.

Coping strategy sub-sets and mental health factors. The second research question was answered by running four canonical correlation analyses to explore the relationship between four sets of coping strategies— self sufficient problem-focused, avoidant coping, socially supported coping, and self sufficient emotion-focused coping— and the three measures of mental health: HTQ, HSCL-anxiety, and HSCL-depression.

The first canonical correlation is relating self-sufficient problem-focused coping in relationship to mental health factors. Self-sufficient problem focused coping style is directed towards reducing or eliminating a stressor. Only the first canonical correlation between the two variables was found to be statistically significant with a value of 0.67 and a canonical $R_c^2=0.45$. The variance is 45%, which is the portion of the mental health variate set explained by the self-sufficient problem-focused coping variate set. The canonical correlation results demonstrated that the self-sufficient problem-focused coping scores were strongly associated with the mental health factor scores and the two sets measured shared a large degree of variance.

The canonical standardized coefficient along with the correlations between coping strategies and canonical variables of the mental health factors showed that active planning is most strongly related to the mental health factors. This suggests that as active coping is used as a coping strategy, participants will show decreased mental health symptoms. In addition, as suppression of emotions increased, mental health symptoms also increased.

These findings are consistent with previous research. Mann (2004) studied the effects of suppression of emotions and found that the suppression of emotions, especially after experiencing a traumatic event, can cause one to feel depression. In DRC, people believe that emotional suppression is a sign of strength and that outward emotional expression is weak. In a society where people are constantly existing in survival mode, using suppression as a coping strategy may feel like the only way to cope with the magnitude of stressors in everyday life. However, suppression of emotions can be detrimental to the mind and body.

The second canonical correlation analyzed was between mental health factors and avoidant coping strategies. Avoidant coping strategies are associated with personality characteristics and outcomes that are negative (Litman, 2006). Only the first canonical correlation between the two variables was found to be statistically significant with a value of 0.68 and a canonical $R_c^2 = 0.52$. The variance is 52%, which is the portion of the mental health variate set explained by the avoidant coping variate set. The canonical standardized coefficient along with the correlations between coping strategies and canonical variables of the mental health factors showed that behavioral and mental disengagement are most strongly related to the mental health factors. As behavioral and emotional disengagement increase, symptoms of all three mental health measures increase.

A closer look at the canonical correlation analysis indicates symptoms of PTSD and depression strongly correlated with avoidant coping. This correlation shows that participants who utilize emotional and behavioral disengagement will have higher levels of PTSD and depression symptomology. Kitayama, Mesquita and Karaswa (2006) argue that people experience engaging or disengaging emotions because of the cultural affordances to which

they are exposed and conclude that engaging emotions is a predictor for happiness.

Furthermore, Fledderus et al. (2010) concluded that the relationship between depression and anxiety are mediated by experimental avoidance. These results suggest the importance of encouraging emotional and behavioral engagement as a means to cope with both acute and past-unresolved trauma.

The third canonical correlation analyzed was between mental health factors and socially supported coping. Socially supported coping is the individual's perceived availability and access to resources from her/his social network. Only the first canonical correlation between the two variables was found to be mildly statistically significant with a value of 0.46 and a canonical $R_c^2 = 0.41$. The variance is 41%, which is the portion of the mental health variate set explained by the socially supported variate set. The most important predictor of increased mental health symptomology was the use of instrumental social support and secondly the use of emotional social support. Similar to the second canonical correlation run, anxiety was not significantly weighted in this model. This suggests that primarily PTSD and secondly depression contributed to the first canonical function.

These findings confirmed research conducted on RCT. "According to Relational-Cultural Theory, the goal of development is not forming a separated, independent self, but rather the ability to participate actively in relationships that foster the wellbeing of everyone involved" (Ruiz, 2011, p.69). Consistent to the tenets of RCT, as participants in this study sought instrumental and emotional social support, they experienced less severe/less debilitating PTSD and depression.

The last canonical correlation analyzed was between mental health factors and self-sufficient emotion-focused coping. Self-sufficient emotion-focused coping is directed towards changing one's own emotional reaction. Only the first canonical correlation between the two variables was found to be statistically significant with a value of 0.83 and a canonical $R_c^2 = 0.69$. The variance is 69%, which is the portion of the mental health variate set explained by the self-sufficient emotion-focused variate set. This canonical correlation model was the most significant model of the four conducted for this study. The results show that increased positive interpretation was a predictor for increased levels of PTSD and depression. Once again, anxiety was not a significant variable in this model. Following positive reinterpretation, restraint coping and acceptance were significantly weighted in this model. Positive interpretation coping also showed a significant relationship in the individual correlation model, which suggests that it is a firm predictor of increased symptomology on the mental health indicators, most importantly PTSD and anxiety.

Limitations

As with all research, there were limitations in this study that could impact the significance of the findings and the generalizability of the results. This researcher took the necessary precaution to ensure the strength of the quantitative analysis. The limitations in the study included sample size and instrumentation.

Sample. The population sample in this study was limited due to lack of resources and timing. Each of the three instruments was read aloud to participants given language and literacy constraints. Each interview took a total of two hours, thus limiting the number of participants in the study. The sample in this study was also limited because a non-probability

convenience sampling method was utilized to obtain study participants. Each of the 50 participants in the study was a member of the CEPAC church congregation located in Buakvu, DRC. Research was collected from a group of women who were already involved in the church and trusted the head pastor, this fact added to the possibility that the results were non-representative, specifically on the religious coping scale. Though the study participants were diverse in their age and the different villages from which they resettled, diversity was significantly narrowed by the social backgrounds of the women involved... all extremely impoverished and uneducated. This clearly limits the generalizability of this study to larger populations in the DRC. However, it is important to note that even though the sample was not a perfect representation, this population accurately represents many of the women currently residing in eastern Congo due to the ongoing conflict. It has been estimated by the United Nations High Commissioner (UNHCR) for Refugees that there are 2.7 million IDPs residing in DRC (UNHCR, 2015).

Instruments. A self-report measure was used in the current study due to the high rate of illiteracy. Each assessment was read aloud to the participants. Each assessment was composed of a Likert scale range from 1-4, 1 being “not at all” and 4 being “very much.” Participants were read aloud the question and then asked to point on a piece of paper to the varying degree that they felt represented their answer. Four pill bottles represented the answers 1-4. The first pill bottle was empty, the second was 25% full, the third was 75% full, and the fourth was completely full. These pill bottles represented the varying degree to which one can experience a symptom. This tactic was implemented to cut down on the threat to internal validity, as the researcher discovered from previous research with Congolese

participants that many were unable to recognize a symptom existing in varying degrees. Thus it was important to discuss with each participant before the interview how a symptom can exist on a continuum.

Though each participant in this study was briefed on how to use the photo of the pill bottles to express the varying degree to which they experienced the symptom, it was possible that participants still struggled with this concept. The idea that a symptom can vary on a continuum might be difficult to understand due to the linguistics of the Swahili language. In Swahili, there are few words to describe a concept varying in degrees, thus it is a possibility that participants gave the answer of a 4, when realistically it was a 3. Though the researcher took careful precaution to limit/reduce the potential for this statistical distortion, it still remains a possibility.

Recommendations for Future Research

In the last few years, researchers in the field of psychology, public health, and medicine have showed vetted interest in the emotional and physical effects of trauma and displacement on women, men and children in conflict zones and post conflict zones. As stated previously, research should first focus on the experiences of individuals and communities effected by ongoing trauma, displacement, or other atrocities. Understanding the complex trauma narrative in its entirety can aid in the development and creation of culturally appropriate psychotherapy and group methodology. Furthermore, it is imperative that future research focuses on the role that the community plays in formulating a working definition of mental health and how the community at large makes sense of the western concept of mental health.

Tang argued that, “human experiences, including traumatic encounters, are typically filtered through the cultural lenses that help to define them and hence influence the pattern of coping and subsequent adjustments (as cited in Drozdek and Wilson, 2007, p. 127). This argument stresses the importance of first understanding the cultural context in which the research participants reside. Research similar to this study, done on a larger scale, is imperative in order to more fully open a lens through which Congolese women can be seen and their unfolding stories told. Future research on coping strategies should encompass a larger region and include both men and children to paint a more comprehensive picture.

One of the first studies of its kind was conducted in DRC by Mukwege et al., (2011). Mukwege et al. (2011), through the Harvard Humanitarian Initiative in 2007, conducted research to characterize the experience of sexual and gender based violence perpetrated on females. This mixed methods study, focused on telling the story of survivors, provided a seminal and influential research foundation upon which to base further inquiry and build further insight. In conclusion, future research should continue to study coping strategies, the lived experiences of trauma and displacement, and the cultural ideology of healing and health. This last piece is particularly important. Without understanding how one heals and how healing is experienced within the culture, it is unlikely appropriate programs and treatments will be developed.

Secondly, research should continue to be conducted on how to solve the problem that exists in many LMIC... the treatment gap. Without this piece of the puzzle, it will prove difficult to implement reform from any treatment-based research. As stated previously, Mukwege et al. (2011) recognized that access to care was one of the main barriers to

providing service. Patel (2012) reports that the WHO estimates that there are nearly five hundred million people living on the planet who are affected by mental illness. Petersen et al. (2011) sought to find a solution to fill the large treatment gap for depression and other mental health concerns in Africa and other low middle-income countries. Petersen et al. suggest that in order to close the treatment gap in mental health service, accessibility providers are challenged to adapt a task-shifting approach that integrates mental health services into primary care settings.

There is a need for further research to be conducted on the feasibility of the task-shifting model in countries like DRC, where the annual ministry of health budget is abysmal, leaving funding for mental health services to fall on development oriented non-governmental agencies. In addition, it is important to research the sustainability of the task shifting model and determine the buy-in from the host country. Most significantly, when research is conducted to determine how to fill the access to treatment gap, key leaders in the community and officers in the ministry of health should be invited to play a role in the research as they are the ones who will be responsible for the implementation. They also know how their health systems work and will have vital ideas of how to move towards filling the gaps that so widely exist.

Recommendations for Practice

Results from this study are intended to inform future mental health treatment practices in DRC and beyond. They show that when Congolese women engage in positive reinterpretation, seeking both instrumental and emotional social support and active coping, their symptoms on all three measures of mental health decrease significantly. Furthermore,

this research concludes that the use of distraction, suppression, and restraint coping to deal with a stressor can have negative implications and lead to increased levels of mental health symptomology. This study concludes that the prevalence of both depression and PTSD were high amongst this population of women. These findings further suggest the importance and need comprehensive mental health care in eastern DRC. In Rehberg's (2014) research on the politics of mental health and psychosocial programmes in humanitarian settings she concludes that programs can be problematic due to their, "homogenizing, pathologising, controlling and depoliticizing nature" (p.7). Rehberg (2014) further suggests that in the mental health and psychosocial support field there needs to be continual progress made towards implanting care that is culturally appropriate and empowering.

Aldwin illustrated that, "much of psychotherapy involves teaching individuals new and presumably more effective coping strategies for dealing with both problems in the environment and ways to regulate their emotions" (Aldwin, 2007, p.181). This research shows that if new, effective education on coping strategies and the alleviation of stress were built into mental health treatment care, it has the potential to lower rates of mental health concerns. Furthermore, this research shows that it would be imperative for mental health care to utilize community engagement activities and group based treatments, as seeking social support and connectedness were strongly related to positive mental health outcomes.

As previously stated, creating any type of mental health treatment program must involve input and wisdom from local mental health professionals, local healers, and community members. Tang stresses that, "as current theoretical models of trauma and their treatment implications have been generated from mostly middle-class English-speaking

individuals, they may not be applicable to individuals from other socio-cultural background (as cited in Drozdek and Wilson, 2007, p. 127). It is important to remember that when developing any type of treatment using coping strategies, further investigation must be done to fully understand the cultural meaning of these western concepts within the social context.

Conclusion

Mental health research in DRC and surrounding countries is relatively new. Prevention and treatment efforts for women, men and children living with mental health concerns in LMIC in sub-Saharan Africa have only sparked the interest of researchers in the past few years. Through the efforts of non-governmental agencies and the WHO, mental health has recently been seen as a serious public health concern throughout sub-Saharan Africa and specifically DRC, where the war has claimed the lives of 5.4 million; it is said that everyone living in eastern DRC has experienced a narrative of trauma. The purpose of this study was to gain knowledge to inform future mental health treatment modalities specific to Congolese women. Similar to previous research findings, there was a significant relationship between mental factors and coping strategies. This research made a contribution to the field not only as the first study of its kind conducted in DRC, but also by providing increased knowledge and deeper insight into the lives of internally displaced women and how they cope with the unrelenting myriad of stressors in their lives.

From these results, it can be concluded that mental health treatment and prevention education involving effective coping strategies has the potential to decrease mental health symptoms. In this study, symptoms of depression and PTSD were extremely prevalent

among participants, which speaks to the importance of creating and implementing culturally appropriate treatment and closing the gap to care in DRC.

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APPENDICES

Appendix A: Informational Questionnaire and Informed Consent

Demographic Information:

- 1) How old are you?
- 2) How many years has it been since you resettled in Buakvu, DRC?
- 3) How many children do you have?

Informed Consent:

Hello, my name is Ashley Nemiro. I am conducting research in Bukavu, DRC to learn about women's coping responses and health. You have been chosen to participate in the study.

I ask a maximum of three hours of your time that will consist of answering closed-ended questions by using three different assessment measurements including: the Harvard Trauma Questionnaire, the Hopkins Symptom Checklist, and the COPE.

I want to assure you that all of your answers will be kept strictly confidential. I will not keep a record of your name or address. You have the right to stop the interview at any time or to skip any questions that you don't want to answer. Further, there are no right or wrong answers. Some of the topics may be difficult to discuss, but many women have found it useful to have the opportunity to talk about them.

Risks

The risks for this study are very minimal but it is possible that the questions being asked may cause an emotional reaction. If this happens, please contact Ashley Nemiro to discuss your reaction in-depth.

Your participation is completely voluntary but your experiences could be very helpful to other women in DRC.

NOTE WHETHER RESPONDENT AGREES TO INTERVIEW.

DOES NOT AGREE TO BE INTERVIEWED

AGREES TO BE INTERVIEWED.

I read and understand the policies for attending group. My questions have been answered satisfactorily. I will adhere to the policies for the trauma groups.

Participant Signature _____ Date _____

Appendix B: COPE Inventory

COPE

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Then respond to each of the following items by blackening one number on your answer sheet for each, using the response choices listed just below. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU--not what you think "most people" would say or do. Indicate what YOU usually do when YOU experience a stressful event.

- 1 = I usually don't do this at all
- 2 = I usually do this a little bit
- 3 = I usually do this a medium amount
- 4 = I usually do this a lot

1. I try to grow as a person as a result of the experience.
2. I turn to work or other substitute activities to take my mind off things.
3. I get upset and let my emotions out.
4. I try to get advice from someone about what to do.
5. I concentrate my efforts on doing something about it.
6. I say to myself "this isn't real."
7. I put my trust in God.
8. I laugh about the situation.
9. I admit to myself that I can't deal with it, and quit trying.
10. I restrain myself from doing anything too quickly.

11. I discuss my feelings with someone.
12. I use alcohol or drugs to make myself feel better.

13. I get used to the idea that it happened.
14. I talk to someone to find out more about the situation.
15. I keep myself from getting distracted by other thoughts or activities.
16. I daydream about things other than this.
17. I get upset, and am really aware of it.
18. I seek God's help.
19. I make a plan of action.
20. I make jokes about it.

21. I accept that this has happened and that it can't be changed.
22. I hold off doing anything about it until the situation permits.
23. I try to get emotional support from friends or relatives.
24. I just give up trying to reach my goal.
25. I take additional action to try to get rid of the problem.
26. I try to lose myself for a while by drinking alcohol or taking drugs.
27. I refuse to believe that it has happened.
28. I let my feelings out.
29. I try to see it in a different light, to make it seem more positive.
30. I talk to someone who could do something concrete about the problem.

31. I sleep more than usual.
32. I try to come up with a strategy about what to do.
33. I focus on dealing with this problem, and if necessary let other things slide a little.
34. I get sympathy and understanding from someone.
35. I drink alcohol or take drugs, in order to think about it less.
36. I kid around about it.
37. I give up the attempt to get what I want.
38. I look for something good in what is happening.
39. I think about how I might best handle the problem.
40. I pretend that it hasn't really happened.

41. I make sure not to make matters worse by acting too soon.
42. I try hard to prevent other things from interfering with my efforts at dealing with this.
43. I go to movies or watch TV, to think about it less.
44. I accept the reality of the fact that it happened.
45. I ask people who have had similar experiences what they did.
46. I feel a lot of emotional distress and I find myself expressing those feelings a lot.

47. I take direct action to get around the problem.
48. I try to find comfort in my religion.
49. I force myself to wait for the right time to do something.
50. I make fun of the situation.

51. I reduce the amount of effort I'm putting into solving the problem.
52. I talk to someone about how I feel.
53. I use alcohol or drugs to help me get through it.
54. I learn to live with it.
55. I put aside other activities in order to concentrate on this.
56. I think hard about what steps to take.
57. I act as though it hasn't even happened.
58. I do what has to be done, one step at a time.
59. I learn something from the experience.
60. I pray more than usual.

Appendix C: Harvard Trauma Questionnaire

The following are symptoms that people sometimes have after experiencing hurtful or terrifying events in their lives. Please read each one aloud carefully and ask the patient to decide how much the symptom bothered them in the past week.

1 = Not at all

2 = Once per week or less/ a little

3 = 2 to 4 times per week/ somewhat

4 = 5 or more times per week/ very much

1. Recurrent thoughts of memories of the most hurtful or terrifying events
2. Feeling as though the events is happening again
3. Recurrent nightmares
4. Feeling detached or withdrawn from people
5. Unable to feel emotion ex. Numb
6. Feeling jumpy, easily startled
7. Difficulty concentrating on daily tasks
8. Trouble sleeping
9. Feeling on guard
10. Feeling irritable or having outburst of anger
11. Avoiding activities that remind you of what happened to you
12. Inability to remember parts of what happened to you
13. Less interested in daily activities
14. Feeling if you have no future
15. Avoiding thoughts or feelings that remind you of what happened to you
16. Sudden emotional or physical reaction (pounding heart or sweating) when reminded of what happened to you

Appendix D: Hopkins Symptom Checklist

Listed below are symptoms or problems that people sometimes have. Please read each question carefully aloud and ask the patient to describe how much the symptom bothered them in the last week, including today. Place a check mark in the appropriate box.

- 1 = Not at all
- 2 = A little
- 3 = Quite a bit
- 4 = Extremely

1. Suddenly scared for no reason
2. Feeling fearful
3. Faintness, dizziness, or weakness
4. Nervousness or shakiness inside
5. Heart pounding
6. Trembling
7. Feeling tense
8. Headaches
9. Spell of terror or panic
10. Feeling restless or can't sit still
11. Feeling low energy
12. Blaming yourself for things
13. Crying easily
14. Loss of sexual interest or pleasure
15. Poor appetite
16. Difficulty falling asleep
17. Feeling helpless about the future
18. Feeling sad
19. Feeling lonely
20. Thought of ending your life
21. Feeling trapped or caught
22. Worry too much about things
23. Feeling no interest in things
24. Feeling everything is an effort
25. Spell of terror or panic

Appendix E: IRB

From: Deb Paxton, IRB Administrator
North Carolina State University
Institutional Review Board

Date: November 24, 2014

Title: Understanding Congolese Internally Displaced Women: The Relationship between Coping Responses and Mental Health Outcomes

IRB#: 5382

Dear Ashley Nemiro,

The project listed above has been reviewed by the NC State Institutional Review Board for the Use of Human Subjects in Research, and is approved for one year. **This protocol will expire on 11/12/15 and will need continuing review before that date.**

NOTE:

1. You must use the attached consent forms which have the approval and expiration dates of your study.
2. This board complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU the Assurance Number is: FWA00003429.
3. Any changes to the protocol and supporting documents must be submitted and approved by the IRB prior to implementation.
4. If any unanticipated problems occur, they must be reported to the IRB office within 5 business days by completing and submitting the unanticipated problem form on the IRB website.
5. Your approval for this study lasts for one year from the review date. If your study extends beyond that time, including data analysis, you must obtain continuing review from the IRB.

Sincerely,



Deb Paxton NC State IRB