A STUDY OF SOCIAL INJUSTICE AND FORGIVENESS IN THE CASE OF NORTH KOREAN REFUGEES

by

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ABSTRACT

A STUDY OF SOCIAL INJUSTICE AND FORGIVENESS IN THE CASE OF NORTH KOREAN REFUGEES

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The current study evaluated the psychometric utility of Decisional Forgiveness Scale and Emotional Forgiveness Scale for the North Korean refugee population and explored the relationship among social adaptation, religious commitment, unforgiveness, forgiveness style and mental health variables (trauma symptoms and depression) among North Korean refugees. Confirmatory Factor Analyses were conducted to investigate the North Korean version of DFS and EFS with collected data from 269 North Korean refugees. The forgiveness instruments, when modified with appropriate item deletions, could be considered as useful for North Korean refugees. In the Multiple Regression Analysis, four of five predictors (social adaptation, hurt characteristics, forgiveness and unforgiveness) are suggested to indirectly or directly influence mental health for North Korean refugees. Factors of unforgiveness, in particular rumination, were found to be the most predictive variable of trauma and depression symptom.
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CHAPTER ONE: INTRODUCTION

Background of Problem

The Democratic People’s Republic of Korea, also known as North Korea, is characterized as one of the world’s worst violators of human rights and religious freedom and has maintained a communist system since the end of World War II. In 1948, North Korea was established and Kim Il Sung ruled the nation up to his death in 1994. Upon Kim Il Sung’s death, his eldest son, Kim Jong Il, became the de facto leader of North Korea. Since the end of Kim Il Sung’s reign, North Korea has gradually begun to lose absolute control over its citizens (Jung et al, 2005; Ko, Chun. & Oh, 2004).

During his time in power, Kim Il Sung developed *Juche*, a unique political and ideological ruling system (Kwang, 2008; Im, 2001; Park, 1993). *Juche* ideology is commonly explained as being a form of socialist self-reliance, and sometimes as an exotic strain of Marxism-Leninism (Warner, 2008). *Juche* ideology began functioning as a medium to promote the mass idolization of Kim Il Sung. Consequently, Kim has been honored, and even worshiped, as a godlike figure (Kwang, 2008; Im, 2001).

In the mid-1990s there were catastrophic food shortages brought about by floods and drought in North Korea, compounded by power imbalances and an inadequate response from the power structure of the dictatorship. The continuous economic woes of North Korea and food crises have been the leading causes of defection by North Korean residents. Out of 20 million North Koreans, 2 million have starved to death. Another 0.2 million have crossed the border with the sole aim to escape the famine resulting from the ruling dictatorship (Lee, 2002).
Even after escape from their homeland, the futures of refugees still remain uncertain and in danger. Neighboring China does not accept the defectors as refugees on the ground that they are not political refugees, but illegal migrants. Because of China’s harsh policy, defectors are forced to behave like fugitives, constantly living on the run or staying in hiding to avoid deportation. North Korea is notorious for its punishment of repatriated refugees and their family members. Extreme labor exploitation, public torture, sexual abuse and harassment are common practices. The sick and the elderly have an especially hard time surviving due to malnutrition and the unsanitary conditions in North Korea (Choi, 2010).

Statistics show that North Korean women have a higher chance of crossing the North Korean-Chinese border than men. From the years of 2006-2008, the percentage of female North Korean refugees increased to 78 percent of the total population of refugees who escaped to South Korea (Education Center for Reunification, 2010). International communities view human trafficking as one of the main causes of this recent trend of North Korean migration. Traffickers recruit North Korean women by deception, coercion, or abduction. They often seek out poor young women who desperately need food (Choi, 2010). Many North Korean women who lack the funds to cross the border agree to be sold into bondage in China. However, these women are often deceived and exploited much more severely than they expected. After the ensuing trauma of being trafficked and severely exploited, these women are left irrevocably physically and psychologically damaged. And many times, these women are sold and re-sold within the trafficking system, causing the experience of their trauma multiplied several times over. As a direct result of these experiences, it is expected that these North Korean refugees are left to
struggle with extreme emotional instability and unforgiveness towards the North Korean government once they escape.

In 2004, the United States administration created the North Korean Human Rights Act (NKHRA) in 108th United States Congress. NKHRA included making North Koreans eligible for U.S. refugee status and instructing the State Department to facilitate applications by North Koreans seeking protection as refugees and appointing a special envoy to promote human rights in North Korea. The Chinese government feared the passage of NKHRA would encourage more North Koreans to cross the border (Kim, 2006).

**Increasing number of North Korean refugees.** The number of North Korean refugees greatly increased due to food shortages, deteriorating humanitarian conditions, economic difficulties and human rights violations (Ko, Chun, & Oh, 2004). Since 1991, an estimated 500,000 (Western estimations) or 4.4 million (refugees’ estimations) North Koreans have died as a result of starvation. The famines which occurred in the early to mid-1990s were brought on by natural disasters in combination with “a totally inefficient and inept bureaucratic management” of the government-controlled agriculture sector (Warner, 2008). According to the Ministry of Unification database (2010), the numbers of North Korean defectors who have come into South Korea have been increasing dramatically, almost doubling each year. The number of defectors stood at 71 in 1998, 148 in 1999, 312 in 2000, 583 in 2001, 1,141 in 2002, 1,281 in 2003, 1,894 in 2004, 1,384 in 2005, 2,018 in 2006, 2,544 in 2007, 2,806 in 2008, and 2,927 in 2009 (Ministry of Unification, 2010). These statistics, however, reflect the number of refugees who were admitted only to South Korea. When the numbers of North Korean refugees in other
countries are taken into consideration, the total number of refugees stands at 300,000-400,000 (Choi, 2007; Kwon, 2005).

According to the Report on Illegal North Korean Migrants, written by a Chinese governmental research institute, China repatriated to North Korea 5,439 escapees in 1997 and 6,300 in 1998 (Choi, 2000). The U.S. Committee for Refugees (USCR) reported that 15,000 North Koreans were forcibly deported from China in June 2000 alone (Suh et al., 2002, p. 182).

Church as a major religious influence for North Korean refugees. North Korea closed its door to the world and developed a unique political and ideological ruling system called Juche. Juche is the only political ideology and religion of North Korea. According to Juche ideology, collectivism is an intrinsic need and people can exist and develop only when they work as a social collective. Collective life is more valuable than an individual life, which can exist only after the existence of collective life. Hence, the individual life must be sacrificed willingly to the governing body that rules over the collective community (Park, 1993). North Koreans have been educated to hate Americans and to treat Christianity as an arch enemy (Im, 2001).

Jeon and colleagues (2001) investigated the religious activity among 553 North Korean refugees in South Korea. In this study, 61.9 percent were attending Protestant churches, while only 3.8 percent were attending Roman Catholic churches and 2.3 percent were attending Buddhist temples. Of North Korean refugees who had a religious life, 39.9 percent answered that their religion was very helpful in adjusting to South Korean society. Cho (2007) reported that among North Koreans who were religiously active, about 96 percent professed that they were Protestant, 3 percent claimed to be
Roman Catholics, and 1 percent stated that they followed Buddhism.

It is a stunning fact that many North Korean refugees indoctrinated by Juche ideology have become followers of a religion immediately upon defection (Cho, 2007; Jeon, Yu, & Eom, 2007). This can be partially explained by the fact that some are converted while they are in the custody of the National Intelligence Service. However, a larger perspective will reveal that religious involvement is greatly beneficial to the mental and emotional health of defectors (Pargament et al., 2004). Even following their escape, many North Koreans receive support from Korean churches and other various religious organizations in China who specifically aim to minister to refugees (Jo & Kim, 2004). As a result of receiving such essential aid during their defection, refugees are likely to convert to Christianity, or another major religion. After conversion, they find that their newfound faith provides a means of filling a previously unfelt spiritual void (Cho, 2009).

Purpose of the Study

There are several factors influencing mental health among refugee populations. This study considered the five major influencing factors. The predictor variables are social adaptation, religious commitment, unforgiveness, hurt characteristics, and forgiveness style, and the criterion variables are trauma and depression symptom.

The range of research on mental health of refugee populations has taken great strides focusing on traumatic experiences such as starvation, observed violence, and murder of family members (Marshall, Schell, Elliott, Berthold, & Chun, 2005). Kessler et al. (2003) reported that according to the National Comorbidity Survey, 48 percent of men and 49 percent of women with PTSD have also experienced a major depression (Bently, 2010). Many studies have also found depression to be the most prevalent comorbid
psychiatric disorder with PTSD (Creamer, Burgess, & McFarlane, 2001; Kessler, Sonnega, Hughes, & Nelson, 1995). The results from the preceding studies among North Korean refugee sample revealed that the most decisive factors that affected the mental health of refugee were trauma and depression (Jeon, Yu, Cho & Eom, 2008).

The mental health of refugee population has been found to be dependent on level of the social adaptation, as studies have demonstrated that it is linked with trauma and mood disorder (Lee & Song, 1997; Yoon, 2000a, 2000b, Jeon, 1997; Son, 2002). The results of studies among North Korean refugee sample showed that the level of social adaptation is a key factor in mental health after resettlement. (Chae, 2003; Kim, 2003; Lee, 1997; Park & Lee, 1999; Woo, 2005; Yoon, 2000a, 2000b; Jeon, 1997; Son, 2002). In the process of social adaptation, many refugees experience emotional instability (Lee & Song, 1997). Research has suggested that North Korean refugees maybe at risk for psychological disturbance following resettlement and mental health problems lead to the risk of poor psychological and social adaptation (Son, 2002).

Previous research suggests that religious commitment through worship, prayer, Bible reading, attending religious meetings, and relying on God for support are important variables that affect mental health (Jarvis, Kirmayer, Weinfield, & Lasry, 2005; Hummer et al., 2004; Koening, McCullough, & Larson, 2001). A meta-analysis of 34 studies was performed in an attempt to clarify the proposed relationship between religiosity and mental health (Hackney & Sanders, 2003). Through the study it was revealed that a strong correlation exists between subjective religious orientation and good mental health, while there is a weak correlation between institutional religiosity and good mental health (e.g. participation at church activities) (Hackney & Sanders, 2003). Furthermore,
negative aspects also exist in religious orientation and mental health. When God is perceived mainly as a punishing God, this produces feelings of guilt which may mediate between religiosity and depression, (Koenig et al., 2001). In addition, a judging attitude may not promote a good mental health status or be conducive to building a supportive social network (Koenig et al., 2001).

Growing empirical evidence indicates that forgiveness and unforgiveness are related to mental health. The studies associated between forgiveness and health indicate that forgiveness is positively associated with health in direct and/or indirect ways (e.g., Lawler, Younger, Piferi, et al., 2005; McCullough, Pargament, & Thoresen, 2000; Worthington, 1998; Worthington, Sandage, & Berry, 2000; Worthington & Scherer, 2004; Worthington et al., 2007). People with a higher score of forgiveness exhibit several indications of good health, including lower anxiety and depression (Seybold, Hill, Neumann, & Chi, 2001). The key concept of forgiveness regarding its consistency of positive health effects is that forgiveness promotes health through reducing unforgiveness and creating positive emotional experiences (Harris & Thoresen, 2005).

Furthermore, mental health has been found to be dependent on unforgiveness. Accumulated evidence suggests that unforgiveness is negatively associated with people’s mental health (Horowitz, Wilner, Kaltreider, & Alvarez, 1980; McCullough et al., 1998; Nolen-Hoeksema, 1991; Park, 2007). When interpersonal transgressions take place the victim can perceive the transgression as hurtful, offensive, or a mixture of both. Motivations such as revenge and avoidance have harmful effects on individuals’ psychological health (McCullough et al., 1998). Research has consistently shown that rumination has harmful effects on mental health. Rumination is associated with
depression (Nolen-Hoeksema, 1991) and post-traumatic stress disorder (Horowitz, Wilner, Klatreider, & Alvarez, 1980). Among the sample of the North Korean refugees participants who had a high level of PTSD symptoms were found to have higher frequency of unforgiveness (Transgression-Related Interpersonal Motivation) than participants who had a lower level of PTSD (Park, 2007). Thus, it is reasonable to expect that unforgiveness is positively associated with trauma and depression symptoms.

The purpose of this study, therefore, is to extend current studies in this area by exploring the relationship among social adaptation, religious commitment, unforgiveness, forgiveness style and self-reported mental health among the North Korean refugees. The predictor variables are social adaptation, religious commitment, unforgiveness, hurt characteristics, and forgiveness style, and the criterion variable is mental health status.

**Research Questions**

In order to explore the relationship among social adaptation, religious commitment, unforgiveness, forgiveness style and self-reported mental health among the North Korean refugees, the following five research questions are considered.

Part 1. Will the Decisional Forgiveness Scale (DFS) and Emotional Forgiveness Scale (EFS) items lead to a psychometrically sound Korean Forgiveness Inventory?

Part 2. (1) Will social adjustment, forgiveness and religious commitment be inversely related with self-reported trauma and mood disorder symptoms for North Korean refugees?

(2) Will religious commitment and forgiveness be positively related with social adjustment for North Korean refugees?
(3) Will unforgiveness variables and hurt characteristics positively predict self-reported trauma and depression symptoms in North Korean refugees while religious commitment and forgiveness variables inversely predict self-reported trauma and depression symptoms?

(4) Out of the variables explored in this study (religious commitment, forgiveness, and hurt characteristics), will unforgiveness be the strongest predictor of PTSD and depression symptoms?

**Significance of the Study**

Although mental health needs for refugees from various countries have been well documented the mental health of North Korean refugees has not received appropriate attention in spite of their rapid growth in South Korea. According to previous studies on North Korean refugees, their mental health seems to be the determining factor for their successful adjustment into South Korea. But there have been a limited number of studies that investigate mental health issues among North Korea refugees.

Previous studies have helped to identify some factors associated with the mental health status of North Korean refugees. They include the variables of severity of trauma exposure and socio-demographic characteristics such as age, gender, socio-economic status, social support, the level of education in the North, and the length of stay in South Korea (Cho, Jeon, Yoon, & Eum, 2005; Chung & Seo, 2007; Eum 2004; Oh, 2001).

However, previous research has been limited in understanding the importance of religious and spiritual needs for North Korean refugees. The effect of religiosity on mental health is another factor that has not been explored in previous studies of this population. Prior studies of refugees from other countries have shown that religious and
spiritual beliefs promoted perceptions of purpose and meaning in the midst of difficult life experiences (Argyle & Hill, 2000; Chung, 2010; George & Peterson, 1998; Leaman, 2009; Nguyen, 2007; Tan, 2005). Many studies suggest that resources of spirituality and religious involvement can positively impact how an individual can positively cope with stressful life events, such as traumas, losses and adaptation to a new environment (Chen, 2005; Fry, 2000; Gall, Kristjansson, & Chung, 2010; Hood, Spilka, Hunsberger, & Gorsuch, 1996; Krok, 2008; Lindgren, 1995; Nguyen, 2004; Rutledge, 1985). During times of crisis, people often use religion or spirituality to overcome hardship and traumas (Ai, Terrence, Huang, & Ishisaka, 2005; Lindgren & Coursey, 1995; Pargament et al., 1988; Shrimali & Broota, 1987).

Worthington (1998) states the need for studies specifically regarding forgiveness among those who have experienced aggressive trauma. Forgiveness can provide refugees with hope for a future grounded in reality (Tutu, 1998) and an alternative to hate and revenge (Schumm, 1995) where there was once an inability to project a future, resulting in the loss of hope. Refugees can be released from a past they cannot change (Arendt, 1998).

In order to encourage forgiveness and mental healing, it is necessary to identify the resources required to assist refugees in overcoming the residual effects of trauma on their mental health. The necessity of social support in the form of material aid has already been made evident, but this study seeks to further substantiate previous findings that religious and spiritual resources are also essential for the successful adaption of refugees. More specifically, this study will determine the beneficial effects of religious and spiritual resources on the mental health of North Korean refugees. These analyses could
assist future studies in substantiating predictors for PTSD and depression among this population.

Understanding the process of social adaptation and the potential impeding influence of unforgiveness is critical for helping North Korean refugees move toward true forgiveness. Thus, it will be an important initial step to help mental health professionals assist the refugees in releasing incapacitating emotions, unresolved anger, and self-destructive patterns (Holmgren, 2002). Therapists and social workers may be able to provide more appropriate and effective assistance for the refugees through understanding the role of unforgiveness factors in their distress. Learning about their forgiveness style also will be helpful. Furthermore, this study will provide a greater understanding of the effects of unforgiveness on the mental health and adjustment of North Korean refugees by means of comprehensive assessments.

Definitions of Terms

For the purpose of this study, the terms are defined as follows:

_Adaptation:_ Adaptation is defined as the process of adapting to the values and norms of the dominant culture of the host country. It involves changes in overt and covert behavior and thought in response to new and modified surroundings (Berry, 1994). Adaptation is a term used to signify an individual’s ability to function sufficiently in a new cultural environment. Therefore, it is suggested that when individuals are culturally and socially competent, they can maintain active social relations and perform successfully within the new society (LaFromboise, Coleman, & Gerton, 1993). Many social scientists use these words synonymously, while others use _adjustment_ in a psychological or subjective sense. _Adaptation_ is considered more of a sociological term
roughly synonymous with *acculturation, social integration* or *assimilation* (Tomson, 2007). In the present study, the two terms, adaptation and adjustment will be used interchangeably. This term is used to describe the two distinct types of adjustment—psychological adjustment and sociocultural adjustment (Searle & Ward, 1990; Ward & Searle, 1991).

*Depression:* According to the DSM-IV-TR, depression represents a collection of syndromes with the core features including sadness, diminished pleasure in daily activities, demoralization, insomnia or hypersomnia, fatigue, and recurrent thoughts of death (American Psychiatric Association, 2000). In order to meet clinical criteria for a depressive disorder, the condition must cause significant impairment in one or more functional domains, (e.g. social, occupational) and must not be better accounted for by a general medical condition or bereavement.

*Decisional and emotional forgiveness:* Forgiveness is understood by its two styles, decisional and emotional forgiveness (Worthington, 2005). Hook, Worthington and Utsey (2009) defines *decisional forgiveness* as a decision to change one’s behavioral intentions to eliminate revenge and avoidance. One might grant decisional forgiveness and still be emotionally upset, cognitively oriented toward angry, anxious, or depressive rumination, and motivationally oriented toward revenge or avoidance (Worthington & Scherer, 2004). On the other hand, *Emotional forgiveness* is the emotional replacement of negative unforgiving emotions with positive other-oriented emotions, such as empathy, sympathy, compassion, or love toward the offender (Worthington, 2006). Forgiveness involves replacing negative unforgiving emotions with positive other-oriented emotions (Worthington, 2001).
Forgiveness: Enright and the Human Development Study Group (1991) defined forgiveness as an individual's merciful response to someone who has unjustly hurt them. A core emphasis of forgiveness is the decrease in negative responses to the wrongdoer across the realms of cognition, emotion, and behavior toward the wrongdoer, and increase of positive responses to the wrongdoer across the realms of cognition, emotion, and behavior toward the offender (Enright & Human Development Study Group, 1991). The absence of negative response to the wrongdoer is necessary but not sufficient for forgiveness; the presence of positive responses to the wrongdoer is considered essential (Enright & Fitzgibbons, 2000). Another essential element in Enright and colleagues’ definition of forgiveness is that forgiveness is considered to be unconditional (Enright & Fitzgibbons, 2000). Certain responses on the part of the wrongdoer such as apology or remorse are understood as helpful for forgiveness. However, conceptualizing these responses as required conditions for forgiveness to occur prevents access to forgiveness for those who are unable to identify whether these responses are occurring. Forgiveness has also been distinguished from condoning, pardoning, excusing, forgetting, reconciliation, and justice (Al-Mabuk & Downs, 1996; Al-Mabuk, Enright, & Cardis, 1995; Freedman & Enright, 1996).

North Korean defector (Pukanitaljumin): Pukanitaljumin is a legal term officially employed by the South Korean government to refer to a person who has escaped from North Korea and is living in any region other than in North Korea. According to the legal document of Protection of and Settlement Support for North Korean Defectors, a North Korean defector is defined as “a person having an address, an
immediate family, a spouse, and or a job in North Korea who has escaped from North Korea and not acquired foreign nationality” (Lee, 2004).

Transgressions: Transgressions are acts that wrong or morally offend and inflict psychological or physical pain or injury (Worthington & Wade, 1999). In the present study, a transgression entails the abusive experience of psychological and physical pain caused by the North Korean government. Transgressions are particularly destructive when they are repeated, heavily charged with negative emotion, severe, and unaccompanied by transgressor guilt or apology (Worthington & Wade, 1999). Boon and Sulsky (1997) showed that transgression severity, the degree that individuals rate the wrong they experienced, is particularly important when forgiveness is under consideration. Transgression severity is considered a robust forgiveness-hindering variable (Hanna, 2007).

Rumination: Rumination was defined as the automatic, repetitive contemplation of intrusive thoughts, feelings, and images of past events (Berry, Worthington, O’Connor, Parrott III, & Wade, 2005; McCullough, 2001). People who ruminate in a vengeful manner following an interpersonal hurt tend to be less inclined to forgive (e.g., Berry, Worthington, Parrott, O’Connor, & Wade, 2001; McCullough, Bellah, Kilpatrick, & Johnson, 2001). The victim monitors carefully the offender’s response as either relationship accommodating or destructive. If the offender’s response involves denying the wrong doing, then the initial perceived hurt will be reinforced, with subsequent possible stimulation of active reprisal or drawing the victim into passive responses of rumination (Worthington & Wade, 1999).
PTSD: PTSD is defined by the American Psychiatric Association (2000) in the Diagnostic and Statistical Manual Mental Disorder-IV-TR, as the development of psychological symptoms from direct or indirect exposure to trauma. These symptoms include re-experiencing of the traumatic event, persistent avoidance of stimuli associated with the event, persistent symptoms of increased arousal, and distress or impairment in social or occupational roles. Due to the lasting impression of a traumatic event, survivors often report experiencing flashbacks and nightmares. Furthermore, persons or places often serve as reminders of the frightful event, hampering daily functioning and sometimes prompting survivors into avoidant tendencies (Bentley, 2011).

Refugee: According to United Nations Convention (UNHCR, 2007), Refugee was defined as a person who “…owing to well founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it” (Article I.A.2). (UNHCR, 2007, p. 6). The refugees for this study resided in South Korea and United States and the term refugee and defector will be used interchangeably in this study.

Spirituality and Religiousness: The terms religion and spirituality are frequently used interchangeably in psychology research. (Bhui, King, Dien, & O'Connor, 2008; Folkman & Moskowitz, 2004; Klassen et al., 2006; Zinnbauer et al., 1997). Religiousness involves adherence to a belief system associated with particular denominations and
associated rituals and practices, such as Christianity or another religion (Fry, 2000; Miller & Thoresen, 2003).

Religious commitment: Religious commitment is defined as the degree to which a person is involved in his or her religion (Koenig et al., 2001) and the amount of time spent in private religious involvement, the activities of religious organization, and importance of religious beliefs in daily living (Worthington, Wade, Hight et al., 2003). Religious commitment has been measured in several ways, including membership in religious organizations, the attitudes of religious experience, and the frequency of attending church (Worthington et al., 2003).

Unforgiveness: Unforgiveness is defined as a combination of cold negative emotions such as resentment, bitterness, hatred, hostility, anger, and fear along with the motivated avoidance of or retaliation against a transgressor who has violated a personal boundary. Unforgiveness often develops after rumination about a transgression (Wade, Worthington, & Meyer, 2005; Worthington & Wade, 1999), and involves ruminations that may be begrudging, vengeful, hostile, bitter, resentful, angry, fearful of future harm, and depressed (Worthington, Witvliet, Pietrini, & Miller, 2007). Unforgiveness is hypothesized to be directly related to the amount of remaining injustice being experienced (called the injustice gap, by Exline et al. 2003).

Organization of Remaining Chapters

A five-chapter dissertation format is used in this study. Chapter One has provided the background of the problem, purpose of the study and research questions. Chapter Two presents a theoretical literature review on the relationships among social adaptation, religious commitment, forgiveness style/ unforgiveness and mental health for
North Korean refugees. The literature review deals with historical review of *Juche* ideology with North Korean adaptation process.

These independent variables are suggested as potential predictors of a better mental health status. Chapter Three presents the methods included in the research design, instruments and an explanation of the recruitment of prospective participants, research procedures and data processing and analysis. In Chapter Four, the results of the study are presented and recommendations based upon the findings. Chapter Five summarizes the results, discusses valuable findings in this study, and suggests recommendations for future study.

**Summary**

Although mental health needs for refugees from various countries have been well documented the mental health of North Korean defectors has not received appropriate attention in spite of their rapid growth in South Korea. A significant number of North Korean refugees who have been indoctrinated by *Juche* ideology have converted to Christianity, and this underscores the importance of the role of religion and spirituality. However, previous research has been limited in understanding the importance of religious and spiritual needs for North Korean refugees.
CHAPTER TWO: LITERATURE REVIEW

This chapter presents selective and analytical summaries of the literature on the relationships between adaptation process and mental health, religious commitment and mental health, unforgiveness and forgiveness style and mental health. Also the present study explores mental health research on other refugee populations from different parts of the world. It provides an important base for the understanding of North Korean defectors.

Adaptation of North Korean Refugees

Since the 1990s, North Korea has faced economic crisis and reported consistently negative economic growth. In the mid-1990s catastrophic food shortages brought about by floods and drought in North Korea, compounded by power imbalances and inadequate response from the power structure of the dictatorship. In 1998, the North Korean government denied requests by international organizations to verify the scale of the humanitarian disaster.

Out of 20 million North Koreans, 2 million have starved to death while 0.2 million people have crossed the border (Lee, 2002). In this situation, the severe flood damage of 1995 and 1997, as well as failed economic reforms, aggravated food shortages in North Korea. The State-provided rations were reduced and finally ceased completely (Choi, 2010). Economic collapse caused the government’s tight system of control over food and electricity to break down, which ultimately provoked the North Korean people to blame their government for the economic hardships.

In light of its current economic crisis and food shortages, North Korea undoubtedly is in need of comprehensive economic reforms. However, the North Korean regime has consistently avoided implementing reforms despite having multiple
opportunities to do so. The current North Korean regime has avoided reformation to prevent the undermining of its monolithic system. Instead of using any resources to alleviate the poverty and starvation of its people, the government has used nearly all of its national resources and foreign aid to bolster its regime, prepare for possible war threats, and develop nuclear weaponry. The government’s corrupt and unjust use of national funds has become the biggest obstacle to economic reforms and the improvement of general welfare for the North Korean people (Seliger, 2004).

The injustice and corruption found in the North Korean government has resulted in the destruction of trust amongst the members of society. The secret police (People’s security and state security) completely control the public and private life of all citizens. Traditions of family and neighborhood interdependence in North Korea’s originally communal society have been corrupted for the use of government surveillance. The mutual trust which once existed between families and neighbors in a community has broken down and replaced with a system of surveillance between citizens. In such a system, citizens are responsible for the loyalty of their family members and neighbors to the North Korean government, leading to a larger problem of distrust amongst all citizens in North Korean society (Seliger, 2004). When refugees escape from North Korea and realize how even their social relations have been exploited by the government, they experience intense bitterness and anger towards the corrupt North Korean government to which they once pledged their allegiance.

Statistics are not enough to fully explain the extreme personal trauma and tragedy experienced by the North Koreans. The oppression created by the government is largely the motivating factor for defectors who cross the North Korean-Chinese border,
even at the cost of risking their lives. If a North Korean does not leave their homeland, he is forced to submit to a government that uses tactics such as public execution, concentration camps, and other torture tactics to control its people. There are currently about ten concentration camps and hundreds of thousands (or more than 2 million by some accounts) of political prisoners in concentration camps (Warner, 2008). North Korean concentration camps are environments of severe deprivation, physical abuse and psychological abuse at the hands of the guards. The physical conditions of the camp are, in a word, inhumane. Many political prisoners never return to their old lives, as they die from overwork, hunger, or execution from trying to escape (Martin, 2004). Those individuals who have survived the trauma associated with concentration camps commonly experience symptoms of psychosis, paranoia, somatization, anxiety, and dissociation (Song, 2008).

The North Korean regime stresses the sacrifice and subservience of women for the sake of the government. In North Korea, there is a large gap between the salaries offered by the government and their real purchasing power. This gap is often filled by the labor of women in the informal sector. While men stay in the formal sector to complete the government-assigned work, women work extended hours in harsh conditions to support their families (Choi, 2010. Based on interviews of 165 North Korean women, Park (2003) reported that the economic contributions of women do not promote their status in the household. Rather, women are left to deal with increased duties both inside and outside of their households and are exploited for their ability to bring in extra income. If caught complaining, women are easily reported by family members or neighbors to be traitors and disloyal to the North Korean government.
**North Korean refugees in China.** China does not accept the defectors as refugees on the grounds that they are not political refugees but illegal migrants. According to the Report on Illegal North Korean Migrants, written by a Chinese governmental research institute, China repatriated 5,439 defectors in 1997 and 6,300 in 1998 back to North Korea (Choi, 2000). The U.S. Committee for Refugees (USCR) reported that 15,000 North Koreans were forcibly deported in June 2000 alone. Because of China’s harsh policy, defectors are forced to behave like fugitives, living constantly on the run or staying in hiding. Choi (2000) reported that defectors all listed safety, shelter and routine provisions as being immediately needed to sustain a life at a minimum level.

In 2004, the United States administration created the North Korean Human Right Act (NKHRA) in 108th United States Congress. NKHRA supported assistance for North Korean refugees in China and promoted human rights and democracy in North Korea (CRS Report for Congress, 2007). Legislation of NKHRA criticized the Chinese government for capturing and repatriating North Koreans as illegal immigrants. The Chinese government feared the passage of NKHRA would encourage more North Koreans to cross the border (Kim, 2006).

North Korea is notorious for its punishment of repatriated refugees and their family members. They are regarded as national traitors and treated as such. According to Amnesty International (2004), there is a systematic denial of the right to food for political opposition and repatriated defectors. Refugees must be ready to pay the price once they return. According to one survey undertaken by the Commission to Help North Korea Refugees, about 27 percent of defectors who were arrested were tortured and became physically disabled (Moon, Kim, & Lee, 2000). Bodies of repatriated North Koreans are
also displayed for educating and disciplining other North Koreans not to run away to China. Sometimes, repatriated North Koreans are placed in the middle of a village and residents of the village are forced to stone them. In concentration camps, many detainees closed their eyes and threw stones at repatriated prisoners to appease the guards; some would express their aggression and anger with their situation by casting stones exceptionally hard at fellow inmates (Song, 2008).

North Korean women have more chances than men of crossing the North Korean-Chinese border. It has been estimated that at least 75 percent of North Korean refugees in China are women (Kang, 2004). The international community views the human trafficking of North Korean women as one of the main causes of the feminization of the North Korean migration. Bullock (2005) points out that between 80 percent and 90 percent of North Korean female refugees in China are actually trafficking persons, a form of modern-day slavery.

Imbalance in the sex ratio at birth in China has created a shortage of females in Chinese rural areas. The shortage of marriageable young women in rural areas in China combined with the reduced population growth in the Korean-Chinese community has become acknowledged as a serious problem (Kwon, 2005b). The extreme poverty, along with female shortage in China, has produced a stream of North Korean female migration. While the women who have money bribe the soldiers or get assistance from smugglers, poor young women often cross the border through involvement with human trafficking.

Traffickers recruit North Korean women by deception, coercion or abduction. They often seek out poor young women who desperately need food (Choi, 2010). When North Korean women do not have money to pay for crossing the border, they agree to be
sold into bondage in China. However, North Korean women are often deceived and exploited much more severely than they imagine. Traffickers take advantage of the Chinese government’s strict border enforcement and the trafficked women’s fear of arrest and deportation.

AntiSlavery International noticed that despite every miserable circumstance in China, the women think that their present lives are still better than starving to death in North Korea (Muico, 2005). Consequently, North Korean women allowing themselves to be trafficked inside China in order to move to safer areas far from the border region, or to find a place to stay, but they are sexually abused or exploited while or after being transported (Choi, 2010).

The situation defectors must face once they escape from their home land is far from optimistic, and yet many North Koreans still choose to risk their lives to escape the oppression of their government and society. The ultimate goal of defectors who cross the North Korean-Chinese border is not to accumulate wealth, but merely to survive and escape the starvation and extreme poverty that are caused by the unjust policies of the North Korean regime. Defectors face harsh conditions once they enter into China, and some are deported back to North Korea where they face torture or even death as punishment, yet many still continue to do whatever possible to escape from the hands of the inhumane and corrupt North Korean government. Once defectors are able to leave North Korea, they are left with significant mental, emotional, and psychological trauma. Defectors may be free from the hold of the government once they escape into China, but they are burdened by intense bitterness and anger towards the North Korean government even after their escape. In order to adapt to society and culture in South Korea or the
United States, it is necessary to handle their bitterness and forgiveness towards the North Korean government’s injustice.

**South Korea’s response to the refugee crisis.** The numbers of North Korean refugees who have come into South Korea have increased dramatically, almost doubling each year (71 in 1998, 148 in 1999, 312 in 2000, 583 in 2001, 1,141 in 2002, 1,281 in 2003, and 1,894 in 2004, Ministry of Unification, 2010). The demographics of the migrants also have changed significantly; in the past almost all were single adult males, but women began outnumbering men in 2002 and have outnumbered them two to one since 2004. More than 60 percent arrived with family, and approximately 20 percent were children or adolescents. The increase in the overall figure is due in part to the fact that more people enter in families, helped by relatives who live both inside South Korea and abroad (Choi, 2007; Kwon, 2005). Some also believe that men may be more tied to their enterprises, which could make them less mobile (UNHCR, 2007).

South Korea has played a major role in the emergence of the large-scale defection by receiving many of the refugees and helping them successfully adapt to the South Korean society. Basically the South Korean government regards North Korean defectors as “refugees” in a broad sense. It supports the idea that the North Koreans should not been repatriated to North Korea in any case. The Korean government established a comprehensive support system for North Korean refugees. At the entry stage, North Korean refugees who ask for protection or exile are accommodated in provisional facilities that are managed by South Korean embassies or religious organizations. They are given assistance for the first five years in social adaptation, economic life, employment and education (Suh, 2002; Yoon,
Two major departments of the government provide assistance for the North Korean refugees. First, the Humanitarian Affairs Bureau in the Ministry of Unification has the following responsibilities: (1) to plan and coordinate policies on the humanitarian issues concerning North Korean people, (2) to plan and coordinate policies on separated families between North and South, (3) to plan and coordinate policies on the North Korean refugees, and (4) to develop and manage the North Korean refugees support program (Cheon, 2005).

Second, Hanawon (Settlement Support Office for North Koreans) assumes the responsibilities to provide assistance to North Koreans in adjusting to South Korean society (Cheon, 2005). When a defector enters South Korea, the defector (1) goes through education in social adaptation, (2) is given permanent resident status as a citizen of South Korea, and (3) is given financial support for initial settlement and other assistance that may be necessary in the early stages of adaptation (Cheon, 2005; Suh, 2002). Local government along with religious organizations work in cooperation to provide continuous support in job training, job opportunities, admittance to school, tuition, and introduction to various social and support organizations.

North Korean mission organizations based in South Korea have had diverse ministries in China and other countries that help North Korean defectors in their lives and their faith (Park 2008; Jo 2004). Some of the main organizations are YWAM (Youth with a Mission), Campus Crusade for Christ, Joy Mission, Corner Stone International, and Yerang Mission (Jo & Kim, 2004). However, most of these ministries are not known to people for security reasons.
Hanminjok-Bokjijaedan (One People Welfare Fund), World Vision, and many mission organizations send humanitarian aid through South Korean churches, including South Korean Diaspora churches. They send food, medical supplies, clothes, farming equipment, and so on (Jo, 2006). It is easier to contact the North Korean government with an American citizenship than with a South Korean citizenship (Jo, 2006). South Korean Diaspora Christians have an important role in North Korean missions through their own organizations. The major strategies of South Korean churches focus on the North Korean Church Reconstruction movement and humanitarian aid to North Korea.

North Koran refugees who have finished being questioned by authorities are provided with three months of education in the social adaptation to South Korean society (Chang, 2001). Hanawon’s three programs address the various needs of newly arrived refugees. The first focuses on achieving psychological stability for those who have experienced trauma in the process of defecting and also reorienting their attitude and relieving them of anxieties that the new environment can bring. The second is geared toward overcoming culture shock brought on by a lack of understanding of liberal democracy and capitalism and by differences in language, thought, and ways of living. Thirdly, basic job-related skills such as driving, using a computer, cooking, and using a sewing machine as well as career counseling is also provided (Cheon, 2005).

**Juche ideology and adaptation.** From the 1948 division up to the present time, the two Koreas have developed two different social systems, the North based on communism and the South on capitalism. The two Koreas share the same culture, history, and language, but the division has dampened the homogeneity of the Korean people (Kang, 2008). Lee (1999) found three main differences between the South and the North.
First, the North has an extremely collectivistic society that limits individualism. Second, in North Korea, no public activities are allowed without Kim Il-Sung’s permission and teaching. Kim's teachings are introduced in all dimensions of social activities.

In the area of all educational curricula, North Korea has articulated a purpose for each type of school. At every level of education "Kim Il-Sung-ism" and praise of Kim are intentionally injected into the curriculum and every facet of the educational process.

Third, North Korea closed its door to the world and has developed a unique political and ideological ruling system called Juche. The children are continually exposed to the Juche ideology throughout their educational experience (Ha, 2008). People’s participation in organizations is mandatory, and from about the age of two, in the home, nursery, school, and society, North Koreans have been educated to hate Americans, South Koreans and other religions such as Christianity as arch enemies (Im, 2001). Those who do not follow the Juche ideology are separated from ordinary people and imprisoned in concentration camps (Kang, 2008).

Juche ideology began functioning as a medium of the idolization of Kim. Kim Il-Sung has been honored, and even worshiped, as a godlike figure (Im, 2001; Kwang, 2008) and has been thoroughly idolized in North Korea for sixty years. His statue is located in the center of every village and the sites are considered sacred. Furthermore, this idolization is passed down to Kim Jung Il’s son, Kim, Jung Eun. The extent and sincerity of this worship cannot be researched due to the isolated nature of North Korea.

Social adaptation and mental health. There is a huge gap between the South and North Koreans’ thoughts and behaviors as two generations have now passed since the division of the Korean peninsula. North Korean refugees’ process of adaptation is similar
to that of other similar immigrants. In the process, many refugees experience emotional instability and spiritual emptiness (Lee & Song, 1997). Therefore, the level of adaptation is a key factor in the psychological well-being of refugees after resettlement. Political, social, physical, and psychological factors may put refugees at risk for mental illness. Moderating variables such as level of stress, acculturation, employment status, individual personality characteristics, and experiences during the various stages of adaptation also play a role in their mental health (Bhugra, 2004; Williams & Berry, 1991).

In studies that examined social adjustment on mental health of North Korean refugees in South Korea, the common adjustment difficulties noted were (1) financial difficulties such as unemployment and poverty, (2) adaptation stress such as discrimination and bias, lack of familiarity with language, and the way of living in the South, (3) isolation and loneliness, (4) missing family members in the North due to guilt over their defection and not being able to help, and (5) family and other interpersonal conflicts and inability to form trusting relationships with colleagues and neighbors (Cho et al., 2005; Eum, 2004; Hong, 2003; Jeon & Yoon, 2002; Lee, 2000; Lee, 2003; Park, 2008; Yoon, 2000; Yoon et al., 2005).

In Cho’s study (2007), 48.1 percent of North Korean refugees responded that they felt a huge difference in the South, 38 percent answered that lifestyle and culture between North Korea and South Korea are different and only 6.5 percent replied that the lifestyle and culture of the North and South are similar. The refugees have seen that the South Korean society is more individualistic and acknowledges diversity, while North Koreans are more passive and their society is centered on simplicity and practicality.

Several studies have dealt with factors explaining social adjustment among North
Korean refugees. The primary factors influencing adjustment of refugees are gender, age, income, marital status, Communist party membership, economic status in North Korea, level of education received in North Korea, family type and size, whether the defector received formal education in South Korea, whether the person has lived in Pyeongyang, socioeconomic background and other demographic characteristics (Chae, 2003; Kim, 2003; Lee, 1997; Park & Lee, 1999; Son, 2002; Woo, 2005; Yoon, 2000a, 2000b, & Jeon, 1997). Other variables related to entry into South Korea, such as year of entry and length of residence in South Korea, result in differences in adjustment as well (Chae, 2003; Seo, 2004; Woo, 2005).

In several studies on North Korean refugees’ social adjustment and mental health, social resources, such as a mediator, were the focus of research interest (Eom, 2004a, 2004b; Kim, 2008; Lee, 2003; Son, 2002; Ryu, 2001). Lee (2003) found that individuals who had experienced higher levels of perceived social support reported higher levels of psychological well-being than those who reported lower levels of social support. The findings indicated that social support help is critical to the adjustment of North Korean defectors. In Ryu’s study (2001), social support had a significant relation to social adjustment but gender and duration of residence did not.

Thus, only the lucky North Korean refugees manage to escape from the notorious dictatorship, yet arriving in South Korea or the U.S. does not guarantee happiness. Many of them meet a multiplicity of difficulties and they must get used to capitalism and freedom (Oh, 2001). Park (2008) reported that the staying rate of middle and high school students of North Korean refugees in South Korean was only 49 percent. Most refugee students do not have the ability to follow a new curriculum and culture within a limited
period of time without special care. The South Korean education system is one of the most competitive in the world. Refugee parents are so busy adjusting to their work place and new cultural context that it is not easy to care for their children and their school problems (Park, 2008).

Some studies examine relationship social adjustment, values, ideological system, and cultural orientation factors on North Korean samples (Chae, 2003; Lee & Song, 1997; Yoon & Lim, 2007). Lee and Song (1997) found that the differences in the ideological systems bring mental shock and confusion to North Korean refugees on their adaptation. Yoon and Lim (2007) examined the social adjustments of North Korean refugees in South Korea with 1,366 North Korean refugees in South Korea. They explored multiple aspects of social adjustments (political ideological, economical, cultural, social relational, psychological) and health aspects to assess the refugees' adjustment status. The study reported that most North Korean refugees are having difficulties with economic adjustments and 30 - 40 percent of the economically active population are unemployed and those who are employed are involved in part-time employment, manual labors or service type employment. Eighty percent of the North Korean refugees are relying on living assistant funds from the government due to unemployment or low income (Yoon & Lim, 2007).

The refugees are having difficulties culturally adjusting because of differences in language, values, and ideologies (Yoon & Lim, 2007). In social relational aspects, there is a lack of organizations and social gatherings, other than church oriented activities. In cases when the refugees initially fail to develop a relationship with South Korean residents, they end up interacting with other North Korean refugees. In psychological
adjustment aspects, the refugees are having difficulties psychologically adjusting due to cultural and ideological differences between South and North Korea.

Chae (2003) considered cultural orientation factors (North Korean cultural orientation (NKC), South Korean cultural orientation (SKC)) as psychological acculturation strategies, with other related factors, including arrival age, perceived cultural heterogeneity, self-consciousness as a residence basic condition, and the perceived assimilation pressure as a residence process condition. The results show that rising age influences the North Korean cultural orientation positively and the South Korean Cultural Orientation negatively. More specifically, the South Korean cultural orientation influences life satisfaction positively, depression negatively, and cultural competency in the South positively.

Chae (2003) studied cluster analysis for the psychological acculturation orientation. As the result of the analysis, four groups were identified, behavior priority-acculturation orientation group (BPA), cognition priority-acculturation orientation group (CPA), emotion priority-acculturation orientation group (EPA), and integrated acculturation orientation group (IPA). The result demonstrates that the North Korean refugees don't adjust themselves in a unitary way, but each of them has his own unique adjustment pattern; people whose settlement period is less than 3 years tend to show BPA and CPA, and people more than four years demonstrate EPA.

Social resources as a mediator were the focus of research interest in several studies on North Korean refugees’ adjustment and mental health (Lee, 1997; Lee, 2003; Son, 2002; Eum, 2004a, 2004b). Lee (1997) reported that the specific indicators of social support such as presence of a host family and positive relationship with coworkers were
associated with lower acculturative stress level. Lee (2003) found that social support was positively associated with a sense of psychological well-being.

Han studied the depression of North Korean defectors during their early settlement period with 64 subjects through CES-D. However, Eum (2004b) reported social support did not demonstrate any statistically significant association with the level of depression. The findings of the previous studies on the effects of social support showed that unlike the general expectations based on stress theories and previous empirical findings on the general population, social support did not exert many beneficial effects on mental health of North Korean refugees. Some even reported counterintuitive findings on the effects of family support. Han (2001) found that those who defected with their family members reported a higher level of depression, which is opposite to many research findings that recognized family as a primary source of support in the adaptation process in the host country. In this study, economical burden in early settlement period was mentioned as the main cause of a higher level of depression with those who defected with their family members.

Park (2008) examined the characteristics of social support, depression and social adjustment with 197 North Korean refugee adolescents in South Korea. The findings of the study were as follows: (1) North Korean adolescent refugees appeared to suffer from a serious level of gloominess and great difficulty in adjusting to the new societal environment; (2) the longer they lived in South Korea and the higher level of cultural adjustment they experienced; (3) women, the young, and parents-protected students possessed a larger range of social support, and (4) adolescents held a high emotional adjustment level when they had protectors and higher material support. Cho and
colleagues (2005) reported that the number of negative events through the adjustment process was associated with a greater level of depression. Their findings indicated the adjustment stress exerted greater effect on depression than did trauma prior to defection.

Park (2006) examined how factors such as general characteristics (gender, age, level education, health, whether they work or not, income, the length of stay in China or another third-party country, the length of stay in Korea), stress, depression, and social support affected the social adjustment of North Korean refugees in South Korea. The factors affecting their social adjustment in South Korea were employment, health and social support.

**Social adaptation on other refugee populations.** In a meta-analysis of 56 refugee studies published from 1959 to 2002, Porter and Haslam (2005) found that post-displacement conditions moderated health outcomes. Overall, refugees were found to have moderately poorer mental health outcomes than non-refugees. Further, institutional accommodation, restricted economic means, internal displacement, repatriation to country of origin and unresolved conflict were related to worse outcome. Studies containing a higher proportion of female refugees indicated poorer mental health outcomes. (p. 609).

Young (1996) looked at the link between acculturation and psychological adjustment in a sample of 94 Somali refugees. Overall, longer residence in a new country was associated with increased perception of discrimination. Research conducted with other refugee groups has suggested that refugees maybe at-risk for long-term psychological disturbance following resettlement.

Acculturative stress impacts mental health and often results in anxiety, depression,
and a variety of psychosomatic problems (Berry et al., 2002). Mental health problems lead to the risk of poor long-term psychological and social adaptation. According to Berry et al. (2002), mental health is linked to moderating factors, protective and risk factors that exist prior to acculturation (age, gender, education, religion, health, language, pre-acculturation status, migration motivation, and expectations) and those factors that appear during acculturation.

Summary

North Korean refugees face great psychological challenges to escape from traumatic experiences directly or indirectly attributed to the North Korean regime. Unforgiveness towards North Korean government leaders and Juche ideology may impact their ability to adapt to a life of freedom. Also, North Korean refugees are having difficulties in adaptation due to cultural differences between South and North Korea and prejudice. Previous studies show that the factors influencing adjustment of refugees are gender, age, income, marital status, Communist party membership, economic status in North Korea, level of education received in North Korea, family type and size and other demographic characteristics (Chae, 2003; Kim, 2003; Lee, 1997; Park & Lee, 1999; Woo, 2005; Yoon, 2000a, 2000b; Jeon, 1997; Son, 2002).

Mental Health of North Korean Refugees

In the adaptation process of refugees, mental health is considered to be one of the most important factors influencing the successful adaptation and settlement for North Korean refugees. Studies exploring the crucial factors that affect mental health of North Korean refugees and the extent of mental health include (1) general prevalence of the mental health problems, (2) the relationships between the extent and nature of stress
exposures and mental health conditions such as depression and PTSD, (3) temporal change of mental health status. The results from the preceding studies revealed that the most decisive factors that affected the mental health of refugee were trauma and depression (Jeon, Yu, Cho & Eom, 2008).

**Mental health research on other refugee populations.** Mental health research on refugee populations from different regions of the world provides an important base for studies on North Korean refugees. The range of research on the mental health of refugee populations has taken great strides over the last two decades focusing on various regions and cultures (Bentley, 2011).

Research focusing on the mental health status of refugees from Cambodia, Vietnam, Bosnia, Rwanda, Turkey, Poland, Sierra-Leone, Iraq, Iran, and Afghanistan has reflected the diversity in refugee groups around the world (Gerritsen et al., 2006; Kinzie et al., 1990; Laban, Gernaat, Komproe, van der Zweel, & De Jong, 2005; Lawson, 1999; Marshall, Schell, Elliott, Berthold, & Chun, 2005; Mollica, Caridad, & Massagli, 2007; Scholte, van de Put, & de Jong, 2004; Sundquist, Bayard-Burfield, Johansson, & Johansson, 2000)

Researchers have demonstrated that pre-migration experiences such as torture, forced labor, starvation, observed violence, and murder/loss of family members, and post migration stressors such as limited language skills, unemployment, and poverty, are associated with major depression and PTSD. (Marshall, Schell, Elliott, Berthold, & Chun, 2005).

In the adult U.S. population, the *DSM-IV-TR* reported that the lifetime prevalence rate of PTSD is about 8 percent (Chilongo, 2010). The rates in refugee populations are
tremendously higher compared with the prevalence rate of the U.S. population. De Jong et al. (2001) found rates of PTSD ranging from 16 to 37 percent within refugee populations in Algeria, Cambodia, Gaza, and Ethiopia. A study by Weine, Kuc, Dzudaz, Razzoano, and Psvkovic (2001) reported that in a sample of Bosnian refugees, 74 percent met criteria for PTSD. The presence of PTSD due to traumatic events is also high in the Asian refugee population (Kinzie & Jaranson, 2001). In a study of Vietnamese refugees, Kinzie et al. (1990) found that 54 percent of the group was diagnosed with PTSD, while Mollica et al. (1998) found that 90 percent of the Vietnamese refugees in their samples population met the criteria for PTSD as well. Both Kinzie and Mollica found people that showed symptoms of PTSD were more likely to be older females who had experienced multiple traumas (Chilongo, 2010).

According to a study of 586 Cambodian refugees, results showed that 99 percent of the group was exposed to fatal starvation, while 90 percent were subject to forced labor. Ninety percent also experienced the murder of a family member or friend (Marshall, Schell, Elliott, Berthold, & Chun, 2005). A look at this same group's mental health 20 years post-migration showed a 62 percent rate of PTSD and a 51 percent rate of major depression (Marshall et al., 2005). In a study of Iranian, Kurdish, Turkish, Chilean, and Polish refugees who had resettled in Sweden, other factors of migration status appeared to outweigh pre-migration trauma (Sundquist, Bayard-Burfield, Johansson, & Johansson, 2000). The results indicated that post-migration hardship such as economic instability has a significant impact on mental health.

In the U.S., the prevalence rates for major depression for one year have been estimated to range from 2 to 7 percent (Leaman, 2009; Oquendo et al., 2001). Several
causal hypotheses have been proposed for the relationship between PTSD and concomitant depression (Breslau, Davis, Peterson, & Schultz, 2000). Symptoms such as loss of control associated with learned helplessness and depressed affect have been reported from studies of many trauma survivors (Volpicelli, Balaraman, Hahn, Wallace, & Bux, 1999).

In fact, after a traumatic event the possibility of developing depression, along with PTSD increases (Leaman, 2009). Kessler et al. (2003) reported that according to the National Comorbidity Survey, 48 percent of men and 49 percent of women with PTSD have also experienced a major depressive episode (Bently, 2010). Many studies have also found depression to be the most prevalent comorbid psychiatric disorder in individuals with PTSD (Creamer, Burgess, & McFarlane, 2001; Kessler, Sonnega, Hughes, & Nelson, 1995).

**North Korean refugees and PTSD.** Jeon and colleagues (2005) investigated the PTSD condition among North Korean refugees in South Korea over a three year period by documenting the frequency of the traumatic events that were experienced by the refugees while living in North Korea. Jeon and colleagues (2005) reported that PTSD was prevalent among 29.5 percent of their subjects who resided in South Korea. Of these traumatic events, the most frequent events were “witnessing public executions,” followed by “hearing news of the death of a family member or relative due to starvation,” “witnessing a beating”, “witnessing a punishment for political misconduct” and “experiencing the death of a family member or relative due to illness” (p. 151). The result found although the average number of types of traumatic events experienced was higher in men than in women in North Korea, during defection, and in terms of the overall
results with statistical significance, PTSD incidence was higher in women. The reasons for the gender difference remain unclear. Also, this study shows that in addition to the physical trauma (rape and sickness by hunger), the trauma related to human relationships such as trauma related to family members (worry about missing family members), played an important role in the development of PTSD.

Chung and Seo (2007) examined the social adjustment and PTSD symptom level among North Korean refugees. The Social Adaptation Self-rating Scale (SASS) was used to measure social adjustment and the Trauma Checklist developed by Kang (2001) was used to identify PTSD symptom levels. Chung and Seo’s study reported that 60 of the 133 subjects (45.1%) fell within the high-risk group of PTSD. These results show that social adjustment was affected by the PTSD symptom level. A defector who was more satisfied with his new status in South Korea, and was at a lower PTSD symptom level tended to exhibit higher levels of adjustment to South Korean society. Furthermore, the result of the study suggested that PTSD symptom levels may be the most critical factor influencing the successful social adjustment of North Korean refugees to the South Korean society.

Researchers have also examined the extent and nature of pre-migration trauma and its effects on mental health of North Korean refugees (Cho et al., 2005; Eum 2004; Hong, 2004; Jeon et al., 2005; Kim, 2008; Lee, et al., 2001; Noh, 2001). Pre-migration trauma exposure was reported to be positively associated with negative mental health outcomes in most of the studies (Eom, 2004a; Hong, 2004; Jeon et al., 2005; Kang, 2001; Kim, 2008; Lee et al., 2001).

Lee and colleagues (2001) investigated trauma exposure and the prevalence of
PTSD among 170 North Korean refugees in China through Hopkins Symptom Checklist-25 (HSCL-25) and the Harvard Trauma Questionnaire (HTQ). From the significant number of trauma exposures reported, food and water shortage ranked highest (93%) followed by illness without access to medical care (89%), an estimated 56% of the subjects were impacted by PTSD conditions in this study (Lee, Lee, Chun, Lee & Yoon, 2001).

Hong’s (2004) study reported that after three years in South Korea, the number of refugees with PTSD had decreased from 31.8% to 5.3%. According to Hong (2004), 88.8% of those refugees with PTSD or partial PTSD recovered by the end of the 3-year study period. Their finding suggested that time is an important factor in recovery of PTSD. But Tedeschi and Calhoun (1999) reported that time itself is not the most important factor for healing. Unlike refugees in the West or in Southeast Asia, North Korean refugees seem to go through a different healing process in South Korea.

Other studies reported counterintuitive findings. Cho and colleagues (2005) reported different associations between pre-migration trauma exposure and depression from their studies over three years. Their study indicated that pre-migration trauma exposure was inversely associated with depression while traumatic experiences during defection did not exert any significant effects on depression (Cho, Jeun, Yu, & Um, 2005).

**North Korean refugees and depression.** Han (2001) investigated depression of North Korean refugees during their early settlement stage in South Korea. Sixty-four North Korean refugees were assessed using the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), and scores were compared with the results of
other studies on South Koreans and South Korean immigrants to the USA. Though the mean score of the CES-D among North Korean refugees was higher than the results of the other groups on South Koreans and South Korean immigrants to the U.S., there was no statistical significance between them. Also, those who defected alongside family members manifested higher depression scores than those who were alone. The researchers attributed this result mainly to economic burden to support family.

Kim (2005) examined the perceived adjustment stress and the depression symptoms with 152 North Korean refugees through CES-D. As statistical methods, t-test and hierarchical multiple regressions were used. This study shows that the difficulty of the capitalist system for the women is higher than for men. On the other hand, the difficulty of searching for a job is higher for men than for women. This study indicates that cultural difference is an important factor affecting the depressive symptoms for both men and women, and that emotional social support of the family and friends is an important factor reducing depressive symptoms for men.

Cho and colleagues (2005) examined depression levels through the Beck Depression Inventory with 200 North Koreans who defected to South Korea over a three-year period with questions on depression and psychological trauma experienced in North Korea. The findings showed that depression significantly worsened two to four years after arrival to the South. After four years, there was a substantial significant improvement in the male sample’s depression level whereas the female sample’s depression level remained about same. The level of depression of an old age group, a poor health group, and a chronic disease group was higher than any others.

Eum and Lee (2004) observed the relationship between social problem solving
ability and the level of depression. According to the results of the study, more than 50 percent of North Korean refugees were diagnosed to have depression and traumatic experiences significantly on a PTSD scale. Those who were once a part of the middle or upper class in North Korea showed higher social problem solving capabilities than those who belonged to the lower classes. The depression and social problem solving capabilities varied according to the period of stay in South Korea. Traumatic experiences and stress increased depression, and a prolonged adjustment period displayed negative influences on depression.

Kim, Choi and Lee (2009) investigated North Korean refugees’ depression through the CES-D and a projective test simultaneously with 40 South Koreans and 40 North Koreans. The result was that (1) the North Korean refugees demonstrated higher CES-D scores than the South Koreans; (2) women among the North Korean refugees scored highest in depression scores. This suggests the probability that the North Korean women refugees could experience more psychological distress than the North Korean men refugees.

Kim (2008) also reported that the support of family had an effect on improving depression. However, Eum (2004) reported that social support, such as family members, did not demonstrate statistically significant association with the level of depression while social problem solving ability was negatively associated with depression.

The association between socio-demographic variables and mental health outcomes of North Korean samples has varied significantly from one study to another. Many studies explore the relationship between mental health outcomes and gender, age, duration of stay in the South, income, marital status, and education in the North. In regard
to gender, studies with North Korean samples have shown inconsistent associations with depression and PTSD. Park (2007) reported that women were more exposed to interpersonal traumatic events and hyperarousal PTSD symptoms. However, Cho et al. (2005) reported that men were found to have equal or increased depression compared to women. Kim (2005) indicated that the effect of social support on depressive symptoms differed between genders. For men the social support from the workplace authorities was an important factor of reducing the depressive symptoms (Kim, 2005). Regarding age, various studies suggested an association between older age and greater level of depression (Cho et al. 2005) while other studies did not find significant association (Han, 2001).

**Other factors on refugees’ mental health.** Several studies reported that chronic strains such as language barriers, discrimination and poor economic status were linked with depression of refugees (Miller & Pasco, 2004, Safdar, Lay & Struthers, 2003). Language is a specific factor that is linked with mental health outcomes of refugee population in many empirical studies. In fact, some studies showed an expected relationship between lack of language proficiency and symptoms of psychological distress (Beiser & Hou, 2001; Blair, 2000; Chung & Bemak, 2002; Chung & Kawaga-Singer, 1995). Beiser and Hou (2001) found that language proficiency protects mental health by facilitating social contact and promoting the development of new social resources.

Even though North and South Koreas share a common language, language is one factor that North Korean refugees have frequently pointed out as a source of stress in their adjustment process (Kim, 2006). South Korean use a lot of words and expressions
adopted from foreign vocabulary such as English and Chinese characters. Some North Korean refugees confessed difficulties in understanding regional dialects and words derived from the capitalist system.

Economic status is a critical variable that influences the success rate of refugee integration in a new country. Economic integration can have a positive effect on refugees’ adjustment in all other areas; however, unemployment and low-economic status were major factors that can lead to poor mental health and adjustment for refugees (Mohamed, 2001). Several empirical studies on mental health of refugees indicated unemployment as a reason for poor psychological adjustment (Beiser, et al., 1999; Beiser & Hou, 2001; Heo, 2007; Westermeyer, et al., 1989; Lie, 2002; Silveira & Allebeck, 2001; Mohamed, 2001).

Studies of unemployment on refugee samples indicate that: (1) unemployment creates depression through a variety of pathways including financial strain, restriction of social contact, and loss of self-esteem (Beiser & Hou, 2001; Heo, 2007; Silveira & Allebeck, 2001); (2) unemployment becomes a risk factor for depression after the refugees have lived in their host country for a few years; and (3) unemployment effects their self-esteem and perception of the future (Beiser & Hou, 2001).

**Summary**

Mental health is considered to be one of the most important factors influencing refugees’ successful adaptation and settlement. Studies exploring the crucial factors that affect mental health of North Korean refugees and the extent of mental health include (1) general prevalence of the mental health problems, (2) the relationships between the extent and nature of stress exposures and mental health conditions, (3) temporal change of
mental health status. The results from the preceding studies revealed that the most
decisive factors that affected the mental health of refugee were trauma and depression
(Jeon, Yu, Cho & Eom, 2008, Kim, 2006). Researchers have demonstrated that trauma
exposure such as witnessing public execution, starvation, observed violence, and
murder/loss of family members, and post migration stressors such as limited speaking
skills, unemployment, and poverty, are associated with major depression and PTSD
(Marshall, Schell, Elliott, Berthold, & Chun, 2005). Several studies reported that chronic
strains such as language barriers, discrimination and poor economic status were linked
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Allebeck, 2001).

Religion and Mental health

Religious commitment. A growing body of evidence suggests that religious
commitment through worship, prayer, Bible reading, religious rituals at home, attending
religious meetings, and relying on God for support are important variables that affect the
mental health of patients and their healing process (Hummer et al., 2004; Jarvis,
Pargament and colleagues (2004) found that of over 700 studies that have examined the
relationship between religion and mental health, nearly 500 confirmed significant
positive associations between the two variables.
Jarvis et al. (2005) examined the correlation between religious involvement and psychological distress in order to explore how religious affiliation, gender, ethnicity, and immigrant status affect this relationship within Protestant (n=205), Catholic (813), Jewish (201), and Buddhist (150) groups. The level of religious involvement was measured with these three guidelines: 1) whether it was their declared religion, 2) frequency of attendance at religious meeting, and 3) frequency of religious rituals performed at home. The results of the study showed that attendance at religious services was often associated with better health. It was also found that except for male Buddhists, psychological distress and religious involvement were inversely related for all groups.

Chaaya (2006) studied the relationship between religiosity and depression in a group of 740 refugees ages 60 and above. Results suggest that attending religious activities is related to depression within refugee populations. Considering health, demographics, and psycho-social factors, the odds of being depressed were significantly lower for refugees who regularly attended religious activities.

The result of Koenig et al. (2001) was consistent with the result of other studies that report significant relationships between levels of religious commitment and mental health as well. Through these cross-sectional and longitudinal studies, it was revealed that religious commitment was inversely related to psychological distress and depression. Also, religious commitment has been positively associated with optimistic experiences and one’s satisfaction with life. The effects of religious practices (e.g. frequency of prayer, church attendance and self-rated importance of religion), non-religious coping methods, and other socio-demographic variables all influence one’s quality of life (Koenig et al., 2001). Religion can serve as a powerful compensatory mechanism that
protects mental health. Research has shown that many people turn to their religious faith to reduce anxiety and gain encouragement in times of stress (Gallup & Lindsay, 1999; Shrimali & Broota, 1987; Weaver et al., 1998).

A meta-analysis of 34 studies was performed in an attempt to clarify the proposed relationship between religiosity and mental health (Hackney & Sanders, 2003). Through the study it was revealed that a strong correlation exists between personal devotion (subjective religious orientation) and positive psychological functioning (happiness, life satisfaction), while there is a weak correlation between institutional religiosity and good mental health (e.g. participation at church activities) (Hackney & Sanders, 2003). The religious people tend to find more meaning in a tragedy and experience less distress and may be engaging in more effective cognitive processing of the event which allows for the reduction of PTSD and depression (Ai, Peterson & Huang, 2003).

However, some studies have found no overall evidence for a relationship, finding the relationship to be negatively correlated or insignificant (Payne et al., 1991; Schaefer, 1997; Lewis et al., 1997). Payne et al. (1991) reported that religiosity was positively related to a number of measures of psychological well-being but no overall evidence was found for a relationship between religiosity and the prevention of major clinical disorders. The authors concluded that the ambiguous findings are due to the multifaceted nature of religion, and that attempts to categorize religiosity as an overall positive, negative, or neutral force in people’s lives is based on a mistaken conceptualization of religion.

**Religious coping.** One way of distinguishing various coping methods is to define "positive religious coping" and "negative religious coping" strategies (Pargament et al., 1998). Positive religious coping methods are based on a secure relationship with God,
seeking God's love and care, seeking support from clergy or church members, seeking spiritual support, asking for forgiveness, believing in a larger, benevolent purpose to life, and experiencing a sense of connectedness with a spiritual group of people (Harrison, Koenig, Hays, Eme-Akwari & Pargament, 2001). Paragament and colleagues (1998) reported that the use of more positive religious coping strategies has been associated with improved mental health.

The positive religious coping pattern was related to healthful outcomes, including fewer symptoms of psychological distress, psychological growth, life satisfaction, quality of life, and beneficial impacts on mental health (Ano & Vasconcelles, 2005; Davidson, Cornnor, & Lee, 2005; Harrison et al., 2001; Linley & Joseph, 2004; Tuck, Wallace & Pullen, 2001).

Linley and Joseph (2004) reviewed 39 studies that documented change following a traumatic event. They found that in a majority of the studies, religious coping was connected with a positive change after a traumatic event, as well as with emotionally focused coping. Davidson, Cornnor and Lee (2005) found that religious faith enhanced people’s ability to cope with negative life events. A religious life may serve as a way to cope with high stress or poor health. Findings of the connection between positive changes and religious faith were evident after controlling for sociodemographic variables, religious measures (frequency of prayer, relationship with God and a sense of disconnectedness with attendance), and nonreligious measures (Tuck, Wallace & Pullen, 2001). Harrison et al. (2001) found that positive religious coping was consistently related positively to life satisfaction and quality of life and negative religious coping was associated more with symptoms of depression and emotional distress.
The results of Ano and Vasconcelles’ (2005) study supported an earlier review of the literature. They reported that positive religious coping has long-term as well as short-term beneficial impacts on mental health and negative religious coping was positively associated with PTSD. They concluded that negative religious coping might serve as a burden with harmful effects to people who are coping with a stressor.

Negative religious coping can be defined as the use of forms of religion in ineffective ways (Pargament et al., 1998). Negative religious coping strategies reflect weak religious communities, psychological distress, religious struggle, fragile relationship with God, expressing anger at God, feeling punished by God, discontentment with God, dissatisfaction with clergy, negative religious reframing, expressing interpersonal religious discontent, a more gloomy view of life, and a sense of disconnectedness with a religious community (Pargament et al., 1998). These strategies indicate that negative religious coping strategies can result in harmful consequences such as higher levels of PTSD, more psychological distress, greater depression and anxiety, and a poor quality of life (Pargament, Smith, Koenig, & Perez, 1998; Schwartz, Bradley, Sexton, Sherry, & Ressler, 2005).

Schwartz et al. (2005) examined the correlation between self-esteem, social support, and religious coping in a sample of 134 African American women ages 18 to 64. The results indicated that higher levels of PTSD correlated with negative religious coping. Schwartz et al. (2005) also suggest that PTSD symptoms may affect people’s perception of themselves, the world around them, and their faith. Schwartz et al. (2005) suggest that while religion can be a means of coping with difficult, tragic events, it can also be a source of distress.
Religiosity and trauma. Individuals with PTSD who perceive their past experiences in positive religious terms are calmer and less affected by their memories when writing about traumatic incidents. One reason for this is that religious involvement is positively associated with mental health (Chen, 2005; Exline, Smyth, Gregory, Hockemeyer, & Tulloch, 2005; Koenig, 1997; Larson, Swyers, & Cullough, 1997; Pargament, 1997; Worthington, Kurusu, McCullough, & Sandage, 1996).

Chen (2005) examined the effects of taking a religious perspective during a trauma-writing exercise with 177 college students. The outcome of the study suggested that for those who have experienced severe traumas, therapeutic cognitive interventions within a religious framework are more helpful in reducing PTSD symptoms than cognitive interventions alone (Chen, 2005). Exline et al. (2005) examined individuals with PTSD through a writing exercise as well. The results of the study were consistent with other research suggesting that religious practices and beliefs can facilitate the process of finding meaning and advantages in negative life events.

One of the most helpful facets of religion is that it helps people to obtain a sense of meaning from psychological trauma (Chen, 2005; Exline et al., 2005; George, Larson, Koenig, & McCullough, 2000). Also, religion is often what people turn to in times of hardship and trauma, using it as a means to encourage themselves with the belief that the situation will get better (Pargament, 1998; Schuster et al., 2001).

When evaluating a difficult situation, faith in God is what helps one to trust that there is a larger plan, and they will be taken care of despite their present circumstances. A positive outlook on the situation allows one to not only become aware of their pain, but develop comforting answers to existential questions (George, Larson, Koenig, &
However, it is also easy to perceive stress as punishment from God for one’s wrongdoing, which increases the spiritual distress and self-blame (Overcash, Calhoun, Cann, & Tedeschi, 1996).

Religiosity and North Korean refugees. North Korea Bongsoo Church was built in 1988. Chilgol Church, the second Protestant church building in Pyongyang was built in 1992. However, most North Korean refugees were not aware of the existence of this church in the city (Christian Institute for the Study of Justice and Development, 1994).

The Agency for National Security Planning reported that more than 60 percent of North Korean refugees have converted to Christianity (Cho, 2007; Jeon, Yu, & Eom, 2007). Only 23.2 percent replied that they do not have a religion (Cho, 2007). The majority of North Korean refugees responded that they feel good about believing in the Christian faith and that religious involvement is very important in their lives (Cho, 2009). Many North Korean refugees in China choose to go to churches for help to escape into South Korea. The Korean church in China has an important role in transforming the North Korean refugees’ worldview with the gospel. It is surprising that many North Korean refugees indoctrinated by Juche ideology decide to become followers of Christ very quickly.

Conversion may be related to many factors. It may be attributed to attempts to fill their spiritual void with religious faith (Cho, 2007; Ko, Chun, & Oh, 2004). It may also be attributed to the fact that many refugees become Christians after receiving help from South Korean evangelical Christian missionaries during their escape out of North Korea. Many churches and Christians support refugees financially and provide material necessities because when they flee the country, they lose their status, credibility and
family members through separation or death (Cho, 2007; Ko, Chun, & Oh, 2004).

Jun and his research team surveyed religious involvement with 553 North Korean refugees in 2001. In this study, 61.9 percent were attending Protestant churches while only 3.8 percent were attending Roman Catholic churches and 2.3 percent were attending Buddhist temples. Of North Korean refugees who had a religious life, 39.9 percent answered that their religion was very helpful in adjusting to South Korean society, and 45.8 percent answered that religion was a little helpful (Jeon & Jo, 2008). Of these 200 North Korean refugees who arrived in the first two years of the study, 180 North Korean refugees professed a religion. Of these 180, 96.1 percent, or 173, professed Christianity.

Of the two hundred North Korean refugees, 41.4 percent attended religious meetings by themselves, 25.3 percent of them attended religious meetings with the people who helped them come to South Korea and had recommended the religions, and 9.8 percent attended religious meetings for financial help. This shows that the majority of North Korean refugees chose a religion belonging to those who helped them come to South Korea.

Choi (2005) examined the relationship between religious involvement and depression in a group of 149 North Korean refugees. The results showed that (1) 64 percent of North Korean refugees participated in religious activities in South Korea, with 84.6 percent having the belief that their religious activity is helpful; (2) aside from those that do not believe in a religion, Protestant groups who stop having religious events have low membership and involvement on both an intrinsic and extrinsic scale compared to other groups, and (3) Protestant groups have a different scale in intrinsic and extrinsic religiosity concerning religious involvement from other religions.
Cho (2007) examined the correlation between maintaining a religious life and social adaptation with a group of 150 North Korean students in the South. The results revealed that: (1) 67.3 percent of North Korean refugees said that they believed in a religion; among them, 95.9 percent replied that they were Protestant, 2.7 percent answered that they are Roman Catholic, and 1.4 percent followed Buddhism; (2) religion may help their assimilation into society; and (3) although many refugees follow their beliefs, they are not mature in their faith yet.

Cho (2007) also investigated the reasons for having church activities, and he reported as follows: (1) a majority of North Korean refugees wanted to keep their loyalty toward those who helped them because they had received various supports from religious people or evangelists before or after defection; (2) they attend church because they desire to have peace of mind; and (3) they attend church to receive practical support. On top of that, 48.6 percent responded that they receive spiritual support, 25.7 percent answered that they gained interpersonal relationships, 18.9 percent replied that they received material support, and 5.4 percent stated that church members help them solve difficult problems.

Cho, Jun, and Min’s study (2004) explored the relationship between religious orientation and the defense mechanisms of 100 South Korean and 93 North Korean refugees. Results indicated that intrinsic religious orientation was stronger in South Koreans, while extrinsic religious orientation was stronger in the North Korean refugees.

**Summary**

Studies suggest that religious commitment through worship, prayer, Bible reading, religious rituals at home, attending religious meetings, and relying on God for support are
important variables that affect the mental health and healing process (Hummer et al., 2004; Jarvis, Kirmayer, Weinfield, & Lasry, 2005; Koening, McCullough, & Larson, 2001). A strong correlation exists between personal subjective religious orientation and positive psychological functioning, while there is a weak correlation between institutional religiosity and good mental health (Hackney & Sanders, 2003). The majority of North Korean refugees responded that they feel good about believing in the Christian faith and that religious commitment is very important in their lives (Cho, 2009). This response may be attributed to attempts to fill their spiritual void with religious faith (Cho, 2007; Ko, Chun, & Oh, 2004). However, it may also be attributed to the fact that many refugees become Christians after receiving help from South Korean evangelical Christian missionaries during their escape out of North Korea.

Forgiveness/Unforgiveness and Mental Health

Forgiveness has become an important topic for empirical investigation during 25 years in mental health (Enright & The Human Development Study Group, 1991; Enright & Coyle, 1998; Freedman, Enright, & Knutson, 2005; McCullough, Pargament, & Thoresen, 2000a; McCullough, Sandage, & Worthington, 1997). The majority of studies have found that forgiveness is correlated with improved mental health, such as decreased anxiety, depression, anger, desire for revenge, grief, and increased hope, creating positive emotional experiences, self-esteem, positive attitudes, feelings, and behaviors toward the offender (Al-Mabuk et al., 1995; Feldman, & Beckham, 2004; Festa & Tuck 2000; Freedman & Enright, 1996; Hall & Fincham, 2005; Harris et al., 2006; Harris & Thoresen, 2005; Lawler et al. 2005; Reed & Enright, 2006; Rye et al., 2005; Rye & Pargament, 2002; Witvliet, Phipps, McCullough & Worthington, 1995).
Lawler, Younger, Piferi, Jobe, Edmondson, and Jones (2005) hypothesized that spirituality, social skills, negative affects of hurt, and stress should be expected to mediate the relationship between forgiveness and health. They found that the strongest mediators for both state and trait forgiveness was negative affect of hurt. Reduction in negative affect significantly mediated between forgiveness and health (Lawler, Younger, Piferi, Jobe, Edmondson, & Jones, 2005). One might expect that individuals who have suffered a traumatic event at the hands of others may have fewer symptoms of depression if they are able to forgive those individuals (Phipps, Feldman, & Beckham, 2004).

Freedman and Enright (1996) studied the effectiveness of a forgiveness intervention with 12 female incest survivors. A yoked, randomized experimental control group design was used. After the intervention, the experimental group gained more than the control group in forgiveness and hope and decreased significantly more than the control group in anxiety and depression. The results illustrated how forgiving may be psychologically beneficial to individuals who have suffered deep hurts. There is a decided paradoxical value to forgiveness as the forgiver gives up the bitterness to which he or she has a right, and gives the gift of compassion, to which the offender has no right. In the study, not one participant showed psychological worsening or any negative effects as a result of forgiving. Each participant experienced her own individual process of forgiveness. Some participants were able to feel love toward their abuser and enter into an improved relationship with him. Other participants felt relieved that forgiveness could just be a cessation of negative feelings, thoughts, and behaviors toward the abuser.

Studies have found that forgiveness is an important means of maintaining social harmony, (McCullough, 2000; Newberg et al., 2000) and forgiveness may lead to greater
levels of perceived social and emotional support and enhanced sense of community and connectedness with others (Lawler, Younger, Piferi, Jobe, Edmondson, & Jones, 2005; McCullough, 2000; Newberg et al., 2000; Oman, Thoreson, & McMahon, 1999). The capacity to rely on relationship partners during stressful periods is a critical skill for emotional health (Reis, 2001). Forgiveness may offer an effective means of maintaining threatened relationships (McCullough, 2000). McCullough (2000) reported the conclusion that having the trait of forgiveness may modulate a person's hostility towards others and confirmed that a person showing an inclination for forgiveness may have better quality interpersonal relationships and social support.

**Religious forgiveness.** Forgiveness becomes religious when it occurs when one seeks guidance from religion for help in eliminating anger. Religious commitment could help one to forgive, provided the faith emphasizes forgiving others (McCullough, & Worthington, 1999) and encourages one to use a forgiveness problem-solving strategy in the face of interpersonal difficulties (Enright, Santos, & AL-Mabuk, 1989).

Research studies show that the relationship between religiousness and attitudes regarding forgiveness appears to be robust and constant (McCullough, & Worthington, 1999; Enright, Santos, & AL-Mabuk, 1989). Accumulated evidence suggests that religious involvement is positively associated with people’s moral reasoning regarding forgiveness. Enright, Santos, and AL-Mabuk (1989) examined the condition that influenced people’s reasoning regarding the propriety of forgiveness for addressing interpersonal transgressions. The study found that the more one practiced one’s faith, the higher one was in the forgiveness stage.

Studies reported that spiritual coping appears to be most useful in extreme stress
that is out of one’s control and may operate mainly as a form of emotion-focused coping (Pargament, 1997). However, Gall et al. (2006) found evidence of both negative and positive forms of spiritual coping in distress. Survivors who responded to their current life stress by being angry with God tended to experience greater levels of depression. In contrast, those individuals who relied more on forms of spiritual coping that reflect a positive attitude toward God as a source of comfort and support (e.g., religious forgiveness, active surrender) experienced lower levels of depressive mood (Gall et al., 2006). Maltby, Macaskill, and Day (2001) found that the perception of being forgiven by God has been found to have a significant relationship with depression (Krause & Ellison, 2003).

Collectivism and individualism in forgiveness. Cultural differences have long been observed between cultures characterized as individualistic and collectivistic. Researchers propose that individualistic and collectivistic orientations in cultural worldview may influence the understanding of forgiveness (Fu, Watkins, & Hui, 2004; Hook, Worthington, & Utsey, 2009; Oyserman et al., 2002; Suwartono, Prawasti, & Mullet, 2007; Takadu, Weiner, & Ohbuchi, 2001).

Collectivism is defined as a social pattern consisting of closely linked individuals who (1) emphasize their connectedness to other members, (2) place more importance on collective goals than on their own personal goals, and (3) are motivated primarily by the social norms of their group. In contrast, Individualism is defined as a social pattern consisting of loosely linked individuals who (1) tend to make decisions on an analysis of costs and benefits to the individual, (2) place more importance on the personal than the collective goal, and (3) are motivated primarily by their own preferences, needs, and
rights (Triandis, 1995).

Collectivistic Asian cultures tend to have strict social norms governing people’s appropriate behaviors and view conflict as less situational, with responses constrained by social norms. Those who hold to a collectivistic worldview are likely to employ third-party mediators (e.g., family, clean leader, clergy) (Sandage & Williamson, 2005), whereas individualistic Western cultures tend to view conflict as more situational, with a range of response options available to individually respond to the conflict, and understand groups in the society as equally obligated to their members (Takadu, Weiner, & Ohbuchi, 2001). The self is defined as part of a group in collectivistic cultures, but as a separate entity in individualistic cultures (Triandis, McCusker, & Hui, 1990).

Forgiveness and reconciliation are “likely to be closely related in collectivistic cultures,” according to the perspective of Sandage and Williamson (2005), but “considered distinct in order to preserve individual boundaries” in individualistic cultures (Sandage & Williamson, 2005, p.45)

Hook, Worthington, and Utsey (2009) propose a theoretical model that clarifies the relationship between collectivism and forgiveness. Collectivistic forgiveness consists of two propositions. First, collectivistic forgiveness take places within the extensive context of social reconciliation. The importance of maintaining social harmony in collectivistic cultures is central to this relationship. Suwartono, Prawasti, and Mullet (2007) explain why this might be: "because forgiveness constitutes a coping strategy that allows relief from resentment toward a member or several members of the group, this may considerably ease life where contacts with other members of the group are conceived as an everyday necessity” (p. 316).
Second, collectivistic forgiveness is understood primarily as a decision to forgive but is motivated largely to maintain group harmony rather than inner peace. This suggests forgiveness would be less of a personal choice and more of a duty in certain situations (Hook, Worthington, & Utsey, 2009).

Takaku and colleagues (2001) compared participants from the U.S. and Japan on cultural factors influencing decisions to forgive. This study found that "American participants are significantly more likely to report that they were concerned about justice and fairness in this situation," and "Japanese participants are significantly more likely to report that they were concerned about maintaining a good relationship" (Takaku, Weiner, & Ohbuchi, 2001, p. 159).

Lee (1999) suggested that the North Korea has an extremely collectivistic society that limits individualism. Juche ideology starts with the point of view that human beings are set in collectivism (Kang, 2008; Ha, 1992), asserting that humans have no meaning of life without social context, people can exist only when people work as a social collective. According to article 82 of the North Korean Constitution, Collectivism is a basis of socialism (Kang, 1975). People should deem organizations and group activities as valuable and develop a desire to work hard for the society.

Korean culture is based on Confucian philosophy and ethics (Lee, 2004). Based on Confucianism which does not consider individuals as independent entities, Korean traditional culture is viewed as an interpersonal relationship-oriented culture. Thus, Korean tradition involves a collectivistic worldview in some ways (Chong, 2009). Koreans commonly live in a style of strong kinship and extended families, in which collective responsibility and cooperation are valued (Lee, 2004; Park, 2010).
**Decisional and emotional forgiveness.** Worthington (2005) suggested that there are two types of forgiveness, decisional forgiveness and emotional forgiveness, which have different processes. In some cases, decisional forgiveness can activate emotional forgiveness. However, even though the individual has made a sincere decision to forgive, one may not experience full emotional forgiveness. One might still be emotionally unforgiving because he or she is still emotionally upset, angry, anxious, or depressive (Worthington & Scherer, 2004).

The second type of forgiveness is called emotional forgiveness (Worthington, 2005). The influence of forgiveness on health may be more positive when forgiving involves emotional change (Worthington, 2006; Worthington, Witvliet, Pietrini, & Miller, 2007). Based on a review of the literature, Worthington and his colleagues emphasize the emotional dimension of forgiveness regarding associated health benefits of forgiving (Worthington et al., in press; Worthington & Scherer, 2004; Worthington et al., 2007).

Further interest in forgiveness highlights multiple layers and the variables involved in the forgiveness process such as one's disposition to forgive, culture, personality, offense severity, motives, beliefs, values, time, gender, ethnicity, age, and genetics (Enright, Santos, & AL-Mabuk, 1989; Fincham, Beach & Davila, 2004; Hruschka & Henrich, 2006; Mahoney, McCullough & Hoyt, 2002; McCullough & Worthington, 1999; Rye & Pargament, 2005). Researchers have supported that the application of forgiveness among various cultural groups serves as a tool to remedy deeply rooted pain or afflictions (Freedman & Chang 2010; Gamboro, 2002; Freedman & Enright, 1996; Hansen, 2002; Nathan, 2009; Reed & Enright, 2006).
McCullough and Hoyt (2002) studied the relationship between people’s dispositional tendencies and forgiveness. The results suggest that agreeableness might promote the psychological operations that promote forgiveness itself. Empathy for one’s transgressor appears to exert a causal influence on forgiveness (McCullough et al., 1997, 1998), and agreeable people tend to have more empathy for others than do less agreeable people. However, not all studies of forgiveness and health find positive associations (Hargrave & Sells, 1997; McCullough et al., 2001). As Thoresen et al., (2000) point out, context and factors surrounding the offense, such as its severity, the presence of physical abuse, or repeated offenses may influence whether forgiveness leads to beneficial health consequences.

**Forgiveness and injustice.** Another significant issue is whether forgiveness is conditional or unconditional, conditioned by apologies and amends, or not in the case of major offenses. Forgiving shattering hurts involves a tremendous inner struggle, and reconciliation might be impossible or imprudent (McCullough et al., 2000). Philosophers argued that repentance on the part of the wrongdoer is necessary because in repentance, the relational moral balance is restored, which they assumed was a requirement for forgiveness (Schuman & Smith, 2000). Arendt (1998) argued that certain offenses are so evil that people cannot forgive; It is above the human potential to forgive. However, Derrida (2001) disagreed with Arendt; he argued that if one forgives something that is actually forgivable, then one simply engages in calculative reasoning and, hence, does not really forgive. Patton (2000) also excluded the apparent effects of calculative reasoning on forgiveness. Patton stated that forgiveness is promulgated as something that one ought to do for one’s salvation because one is a sinner. Forgiving is not something
that should be done to improve our health but is a figure of a quality of life, when it is lived in relation to God (p. 294).

Accumulated studies reported that that there is a positive link between forgiveness and apology. Apologies reduce perceived injustice and facilitate forgiveness. (e.g., Bottom et al., 2002; Cole, Yali, & Magyar, 2002; Drinnon, 2001; Girard & Mullet, 1997; Girard, Mullet, & Callahan, 2002; Lukasik, 2001; McCullough et al., 1998; McCullough et al., 1997). In many studies on forgiveness and apology, the offender’s apologies, confessions, and explanations were found to be the largest predictor of interpersonal forgiveness (Williams & Gonzales, 2007).

Researchers have attempted to differentiate the lighter form of forgiveness following minor offenses from forgiveness following considerable trauma. Forgiveness in the case of major offenses was labeled *Forgiveness*, with a capital F, while, in the case of minor offenses, the concept was categorized as simply *forgiveness*, with a lowercase f (McCullough et al., 2000).

The Human Development Study Group’s definition of forgiveness does not rule out pursuing justice. There is a theory among forgiveness-nonforgiveness researchers that the pursuit of justice is necessary and a possible option of persons considering forgiveness (Affinito, 2002; Hargrave, 1994). A significant number of forgiveness proponents are supporters of lawful punishments for the wrongdoer (Affinito, 2002). However, some research findings have indicated that when revenge is chosen over the pursuit of justice, it is unlikely to produce the desired results (Baures, 1996), and does little to reduce PTSD, and may actually increase it (Baures, 1996; Herman, 1992; Laufer, Brett, & Gallops, 1985). History of Bosnia and Rwanda have demonstrated that
vengeance can lead to horrible excesses and still fail to restore what was destroyed initially (Minow, 1998; Affinito, 2002).

Worthington and colleagues (2003) reported that interpersonal offenses can create an injustice gap, in which there is a difference between current outcomes and desired outcomes; the magnitude of the injustice gap should be proportional to the amount of unforgiveness that victims feel. Victims can improve their injustice gap by (1) seeking and receiving apologies, (2) seeing legal justice enacted, or (3) engaging in vigilante justice such as revenge or retaliation (Exline, Worthington, Hill, & McCullough, 2003).

**Unforgiveness and mental health.** Rumination in general has been defined as self-focused attention toward one’s thoughts and feelings (Lyubomirsky & Nolen-Hoeksema, 1995). When interpersonal transgressions take place the victim can perceive the transgression as a hurtful, offensive experience, or a mixture of both. Motivations such as revenge and avoidance have harmful effects on individuals’ psychological health (McCullough et al., 1998). Research has consistently shown that rumination has harmful effects on mental health. For example, rumination is associated with anger (Sukhodolsky et al., 2001), depression (Nolen-Hoeksema, 1991), anxiety, (Segerstrom et al., 2000) post-traumatic stress disorder (PTSD; Horowitz, Wilner, Kaltreider, & Alvarez, 1980), and negative relationships (McCullough et al., 1998).

There are different types of rumination including anger rumination, anxious rumination, and depressive rumination (Liao, 2008). Anger rumination refers to thinking about the emotion of anger, focusing one’s attention on angry moods, recalling past episodes of anger, and thinking over the causes and consequences of episodes of anger. Barber, Maltby, and Macaskill (2005) studied the relationship between anger rumination
and forgiveness and found that individuals who have an inclination to dwell on anger memories have difficulties forgiving.

Most of the research on rumination concludes that rumination about an event may play an important role in the forgiveness process (McCullough, Bono, & Root, 2007; Nolen-Hoeksema, 1991; Pyszczynski & Greenberg, 1987). Based on review of the rumination literature, Worthington and Wade (1999) theorized that rumination has a direct causal link with difficulties in forgiveness. According to this theory, the rumination being described is an event-specific blooding, initial reactions of anger, fear, bitterness, and vengefulness. These evidences point to the positive association between anger rumination and unforgiveness. McCullough and colleagues also found that rumination is related to higher scores on measures of revenge and/or avoidance motivation for the transgressor (McCullough et al., 1998).

Using the Transgression-Related Motivations Inventory (TRIM) to evaluate forgiveness, McCullough et al. (1998) reported that rumination about intrusive thoughts, affects and images regarding an interpersonal offense predicted the scores on the Revenge subscale.

**Forgiveness studies on South and North Koreans.** Park (2007) studied the relationship among interpersonal trauma exposure, experiential avoidance, forgiveness and PTSD symptoms. Data from 115 out of 135 North Korean defectors were analyzed. The participants were all exposed to traumatic events in North Korea. The North Korean refugees who had a high level of PTSD symptoms were found to have higher frequency of unforgiveness (Transgression-Related Interpersonal Motivation) than participants who had lower level of PTSD. The results of hierarchical multiple regression analysis revealed
that avoidance motivation (Beta=.258) of TRIM was positively related to recurrence of PTSD symptoms. However, there was weak positive relationship between revenge motivation and recurrence of PTSD symptoms. Gender differences were not found in TRIM (motivation and avoidance motivation) in this study.

Kim (2009) examined the posttraumatic growth (PTG), rumination and acculturation of North Korean refugees with 84 North Korean defectors who were living in South Korea. Four scales were used for each participant: Traumatic Event Stress Symptom Scale, Posttraumatic Growth Scale (Tedeschi & Calhoun (1995), Rumination Scale (Calhoun, Cann, & Tedeschi, 2000), and Acculturation Strategy Scale (Berry, 1994). The result indicated that the group that has more traumatic experience showed a higher level of PTG than the group that has less. It was also verified that the group that undergoes a higher level of PTG, displayed a higher percentage of the integration type of acculturation adjustment than assimilation, segregation, or marginalization types. On the other hand, the group that displayed lower levels of PTG was more closely related to the assimilation type than the integration type. As a result of the two-way anova, the group that was more involved in intentional rumination showed the higher level of PTG than the group that was less. However, the interaction effect between traumatic experience and intentional rumination was not significant in this study.

Chong (2009) explored the relationship between acculturation, religiosity, unforgiveness, forgiveness style, and general health of Koreans through RCI, TRIM, RIO, DFS and EFS with 273 Korean Americans and Koreans. Several psychological instruments investigated with U.S. populations were found to have adequate factorial characteristics to be useful with the Korean population. Multiple regression analysis
indicated that factors of unforgiveness were the most direct and consistent predictors of health, and acculturation and religious commitment also were associated with health status. As an indicator of unforgiveness, rumination about the experience of transgressions was found to be the most significant predictor of health status in this study. The Korean Americans who tended to repeatedly recall their hurt experiences were likely to have worse health than those who did not.

**Summary**

Accumulated studies have found that forgiveness is correlated with improved mental health, such as decreased anxiety and depression and increased positive emotion toward the offender. In contrast, angry expression to the offender was associated with more psychological symptoms. The strongest mediator for both state and trait forgiveness was negative affect of hurt. Thus, reduction in negative affect significantly mediated between forgiveness and health (Lawler et al., 2005). Research shows that the relationship between religiousness and attitudes regarding forgiveness appears to be robust and constant (McCullough & Worthington, 1999; Enright, Santos, & AL-Mabuk, 1989).

Based on literature review, it can be assumed that factors of unforgiveness, social adaptation, and religious commitment are correlated with levels of mental health. For example, religious commitment fosters higher capabilities of social adaptation, which in turn alleviates the mental effects of trauma. Among the multiple variables of relevance in this study, the factor of unforgiveness is the most critical in determining the mental health of North Korean defectors.

The literature review indicated that the relationship between religiousness and
attitudes regarding forgiveness appears to be robust and constant (McCullough & Worthington, 1999; Enright, Santos, & AL-Mabuk, 1989). Many studies suggest that resources of spirituality, religious involvement and forgiveness can positively impact how an individual can positively cope with stressful life events, such as traumas, losses and adaptation to a new environment (Chen, 2005; Fry, 2000; Gall, Kristjansson, & Chung, 2010; Hood, Spilka, Hunsberger, & Gorsuch, 1996; Krok, 2008; Lindgren, 1995; Nguyen, 2004; Rutledge, 1985).

Previous research for North Korean refugees population has been limited in understanding the importance of religious and spiritual needs for North Korean refugees. The effects of forgiveness and religiosity on mental health are factors that have not been explored in previous studies of this population. Based on literature review, understanding the process of social adaptation and the potential impeding influence of unforgiveness is critical for helping North Korean refugees move toward true forgiveness. Moreover, the lack of psychometrically sound instrument is likely contributing to the limited quantity and scope of the study on forgiveness and and mantel health in North Korean refugees. Therefore, the psychometric investigation of DFS and EFS may provide the investigators useful tools to advance the research of forgiveness among North Korean.
CHAPTER THREE: METHODS

The research questions for the present study are divided into two parts. For the first part, will the Decisional Forgiveness Scale (DFS) and Emotional Forgiveness Scale (EFS) items lead to a psychometrically sound Korean Forgiveness Inventory? This question was tested by conducting Confirmatory Factor Analyses. For the second part, several questions are addressed: Will social adjustment, forgiveness and religious commitment be inversely related to self-reported trauma and mood disorder for North Korean refugees? Will religious commitment and forgiveness be positively related to social adjustment for North Korean refugees? Will high levels on unforgiveness variables and hurt characteristics be positively related to self-reported trauma and depression symptoms in North Korean refugees while high religious commitment and high levels of forgiveness variables predict low levels of self-reported trauma and depression symptoms? Out of the variables explored in this study (religious commitment, forgiveness/unforgiveness, and hurt characteristics) will unforgiveness be the strongest predictor of PTSD and depression symptoms? To answer the part 2 research questions, the present study was conducted multiple regression analyses to test the influence of social adaptation, religious commitment, unforgiveness, and forgiveness style on the self-reported mental health of North Korean defectors.

In order to carry out the purpose of this study, this chapter presents an overview of the research design, the selection of participants, the instruments, the procedures to conduct the study, and data processing and analysis.

Research Design

This study utilized a survey design in order to investigate relationships between
adaptation, religious commitment, forgiveness style and mental health. The predictor variables are social adaptation, religious commitment, unforgiveness, hurt characteristics, and forgiveness style, and the criterion variable is mental health status. For the research purpose, a multiple regression analysis conducted to investigate the influence of adaptation, religious commitment, unforgiveness, and forgiveness style on the self-reported health of Koreans. The present study also investigated whether the factors structure in U.S. samples for the Decisional Forgiveness Scale (DFS-NK), and the Emotional Forgiveness Scale (EFS-NK), is consistent for the North Korean refugee population by using confirmatory factor analysis. It is possible a Korean forgiveness inventory with a different factor structure might emerge.

**Selection of participants.** The targeted population of this study was defined as North Korean refugees who meet the following criteria: defected from North Korea before January 1, 2011, currently residing in South Korea or the United States, and of the age of 18 or older. The population of North Korean defectors was relatively small and dispersed, which makes it difficult to gather a fair, representative sample of the population. To handle this problem, the researcher used a snowballing strategy to gather data and the snowballing strategy of gathering data through a wide range of various starting points.

**Instrumentation.** The following instruments were used in the present study: (a) demographic questionnaire; (b) the Social Adaptation Self-rating Scale (SASS); (c) Religious Commitment Inventory -10 (RCI-10); (d) Trauma Scale for North Korean Refugee (TSNKR); (e) Center for Epidemiologic Studies – Depression scale (CES-D); (f) the Most Painful Hurt Experience; (g) The Decisional and Emotional Forgiveness Scale
(DFS/EFS); (h) The Rumination About an Interpersonal Offense Scale (RIO); (i) the Transgression-Related Interpersonal Motivations Scale (TRIM); and (j) Types of Hurts. The RCI-10, DFS, EFS, RIO and TRIM have been used for other ethnic groups, such as Caucasians. They have been translated from English into Korean by Chong (2009). In the current study, Chong’s Korean translation was modified slightly for better understanding of North Korean refugees, which was resolved in discussion with North Korean refugees.

**Demographic Information.** The demographic questionnaire was designed to gather the participants’ background information. The demographic questionnaire comprised a total of 11 questions about age, occupation, gender, marital status, religion, monthly income, educational attainment, length of residence in North Korea and other country, missing family member and reason(s) for escaping from North Korea. See Appendix A for items.

**Social Adaptation Self-rating Scale (SASS).** The Social Adaptation Self-evaluation Scale (SASS) was a 21-item scale for the evaluation of social motivation and behavior in depression, which investigates the areas of work and leisure, family and extra-family relationships, intellectual interests, satisfaction in roles and patient self-perception of his ability to manage and control his environment (Bosc, Dubini, & Polin, 1997). The consistency of the external and internal factors of the SASS has been supported by several researchers (Bosc et al.; 1997; Chung & Seo, 2007; Dubini & Polin, 1997; Montgomery, 1996; Yang et al., 2003:). Each question was rated on a 4-point Likert scale from 0 to 3, resulting in a total score ranging from a minimum of 0 to a maximum of 60. Items 17, 18, and 20 were negatively worded. Higher scores indicated higher levels of social adjustment. For this study, the Korean version (Yang et al., 2003)
of the Social Adaptation Self-rating Scale (SASS) will be used to measure social adjustment of North Korean refugees. SASS has been used in Chung and Seo’s study (2007) on a North Korean refugee sample. In this study, the Cronbach alpha of North Korean refugee sample was .778. The Korean version of SASS reported a Cronbach’s alpha of .79 and the test-retest correlation was statistically significant ($\gamma = 0.653, p<0.01$; Kim, 2001). Sample items include “What value do you attach to your relationships with others?”, “To what extent are you involved in community life (such as club, church, etc.)?”, “Are you interested in scientific, technical or cultural information?”. See Appendix C for this instrument.

**The Religious Commitment Inventory- 10 (RCI-10).** For this study, the Religious Commitment Inventory-10 (RCI-10) (Worthington, Wade, Hight, McCullough, Berry, Ripley, et al., 2003) was used for assessing the level of North Korean refugees’ religious commitment. The RCI-10 was based on earlier 17-item (RCI–17; McCullough, Worthington, Maxie, & Rachal, 1997) versions. It was intended to save time by cutting the scale but maintaining excellent psychometric support (Worthington et al., 2003). RCI subscales measure intrapersonal religious commitment with six items, and interpersonal religious commitment with four items. Thus, RCI consists of a total of 10 items rated on a five-point Likert scale from $1 = \textit{not at all true of me}$ to $5 = \textit{totally true of me}$. Across several studies, the RCI-10 had strong estimated internal consistency, all Cronbach’s coefficient alpha ranging from .88 to .98, 92 for Intrapersonal Religious Commitment, and .87 for Interpersonal Religious Commitment (Worthington et al., 2003). The 3-week test–retest estimated reliability coefficients for the full-scale RCI–10, Intrapersonal Religious Commitment, and Interpersonal Religious Commitment were .87, .86, and .83.
Chong (2009) performed a confirmatory factor analysis on RCI and suggested that RCI-10 is most reliable for the South Korean population when item 1, 2, 9, and 10 were removed (called RCI-6K).

Sample items include “Religion is especially important to me because it answers many questions about the meaning of life”, “Religious beliefs influence all my dealings in life,” and “It is important to me to spend periods of time in private religious thought and reflections.” The RCI–10 is particularly useful for Christians (Worthington et al., 2003). See Appendix G for this instrument.

**Trauma Scale for North Korean Refugee (TSNKR).** Trauma Scale for North Korean Refugee (TSNKR) was originally developed by Kang (2000) for identifying a subject’s current PTSD symptom levels for identifying a North Korean refugee’s current PTSD symptom levels. This scale was developed by an expert group comprising of two psychiatrists, three North Korean defectors and two psychologists. Chung and Seo (2007) modified Kang’s scale by excluding the traumatic event experience checklist (Chung & Seo, 2007). In the study, Chung and Seo’s modified version is used to identify current PTSD symptom levels of North Korean refugees. The reason the latter checklist was excluded from the current study was that this study focused more on the identification of current PTSD symptom levels rather than on analyzing past traumas. The traumatic symptom scale comprises 16 items, each rated on a 4-point Likert scale from 0=Never, to 3=Most Or All the time. Sample items include “acting or feeling as if the traumatic events were recurring,” “experience intense psychological distress on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event,” and “have an exaggerated startle response.”
Cronbach alpha was .87, suggesting that internal consistency was high. See Appendix I for this instrument.

**Center for Epidemiologic Studies-Depression (CES-D).** The Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) is a self-report tool for the assessment of depressive symptoms in the community and clinical settings. This instrument is composed of 20 items and includes six components: depressed mood, feelings of guilt and worthlessness, feelings of helplessness and hopelessness, psychomotor retardation, loss of appetite, and sleep disturbance. It mainly assesses the frequency of depressive symptoms experienced by the participants. Internal consistency and validity have been confirmed (Radloff & Locke, 1986). Results of reliability and validity in general and psychiatric populations suggested internal reliability coefficients of .85 for the general population, .90 for the psychiatric population (Radloff, 1977) and .85 for the college sample (Wei, Russell, Mallinckrodt, & Vogel, 2007). The scale shows high reliability and validity across Caucasian, African American, and Asian populations (Radloff & Locke, 1986).

In the Korean version of the CES-D, participants were asked to indicate how often they had experienced each symptom in the past few weeks on a 4-point scale, from 0 = rarely or none of the time, 3 = most or all of the time. The validity of the Korean version of the CES-D was supported by psychiatric patients demonstrating mean scores that were twice as high as those of the community sample (discriminating between the community residents and psychiatric patients) (Noh, Avison, & Kaspar, 1992). The Cronbach’s alpha of the Korean version of the CES-D were 0.87 for the earlier study (Choi et al., 2009). Sample items include “I felt that I could not shake off the blues even
with help from my family or friends”, “I had trouble keeping my mind on what I was
doing”, and “I felt that everything I did was an effort.” Kim (2008) investigated the North
Korean defectors’ depression through the CES-D. In this study, Cronbach alpha of North
Korean sample was .84 (Kim, 2008). See Appendix K for this instrument.

The Decisional and Emotional Forgiveness Scales. The Decisional
Forgiveness Scale (DFS), which was developed by Worthington, Hook, Witvliet et al.
(in press). measures the level of decisional style of forgiveness. The DFS consists of 8
items rated from 1 = strongly disagree to 5 = strongly agree. DFS measures intentions of
social attitudes with two subscales: Prosocial intention and Inhibition of negative
intention. The coefficient alphas score for the DFS and subscales were .83 for the full
scale, .78 for Prosocial Intentions, and .83 for Inhibition of Harmful Intentions. Sample
items include “I intend to try to hurt North Korean government leaders the same way they
hurt me,” “I will try to get back at the North Korean government.” The Emotional
Forgiveness Scale (EFS; Worthington et al., in press) measures the level of emotional
style of forgiveness in one specific situation. EFS consists of eight items and is rated from
1 = strongly disagree to 5 = strongly agree. The measure contains two subscales:
Prosocial Intention (PSI) and Inhibition of Negative Intention (INI). The coefficient
alphas scores for the EFS and subscales were .81 for the full scale, 85 for the presence of
Positive Emotions, and .78 for the Reduction of Negative Emotions. Sample items
include “I care about North Korean government leaders” and “I feel sympathy toward
Kim Jung-II and the North Korean government.” See Appendix O for this instrument.

Rumination about an Interpersonal Offense Scale (RIO). The
Rumination about an Interpersonal Offense Scale (RIO; Wade, Vegel, Liao, & Goldman,
2008) was developed to capture state or situation-specific rumination. Items were developed based on the definition and the literature on rumination and by reviewing other measures that attempted to measure rumination about specific offenses (Wade et al., 2008). Wade and colleagues (2008) reported that internal reliabilities were above .90 through three samples, and factor loadings were .78 and above except two items (.52 and .57 for the two samples). Sample items include “I can’t stop thinking about how I was wronged by North Korean government,” and “I find myself replaying the hurtful events caused by the North Korean government over and over in my mind.” Ratings from 1=strongly disagree to 5=strongly agree. See Appendix Q for this instrument.

The Transgression-Related Interpersonal Motivation Scale (TRIM). Transgression Related Interpersonal Motivations Inventory (TRIM; McCullough et al., 1998) measures individuals’ motivations to avoid and seek revenge against their transgressors. Avoidance and revenge represent negative emotional-motivational states in reaction to a specific transgression (McCullough et al., 2003). Subscale of original TRIM consists of seven items that measure one’s motivation to avoid contact with a specific transgressor. The revenge subscale has five items and reflects one’s motivation to seek revenge against a transgressor. The revenge subscale assesses respondents’ desire to seek revenge against someone who recently committed a specific transgression against them (e.g., “I want to make the North Korean government pay,” “I want to get even with the leaders of the North Korean government”). The avoidance subscale assesses respondents’ desires to maintain relational distance from their transgressor (e.g., “If I meet North Korean government leaders in same place, I’d withdraw from the North Korean government leaders.”) Participants are asked to rate the extent to which they agree with
each of the items based on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Cronbach alpha is .86 for the Avoidance subscale. And .90 for the Revenge subscale in a sample of university students (McCullough et al., 1998). See Appendix T for this instrument.

**Procedures**

Prior to data collection, a description of this study and the data collection procedures were reviewed by the Liberty University Institutional Review Board (IRB), and permission to conduct a survey study was obtained from the IRB (Approval #1227.011612). After the present study was approved, a pilot test was implemented to a small sample of North Korean defectors. After reviewing any needed translation or instructional adjustments, the survey questionnaire was made available in a paper copy form.

**Recruitment of participants.** The researcher worked from multiple starting points in both South Korea and the United States to survey the population of North Korean defectors. The starting points include the following: Talbujanminhwi (association of North Korean refugees), local welfare center, religious organizations, educational institutions, and Talbukja churches (churches formed by groups of North Korean defectors). A general study description script was used to introduce the study to each organization’s leaders. See Appendix X for this script. A memorandum of understanding was developed and submitted to Liberty’s IRB for appropriate documentation of each organization’s agreement to assist in the study. A sample memorandum of understanding is included in Appendix Y of this proposal.

*Hanjunghup* (Christian Association for North Korean Defector’s adaptation),
Talbukchunyoungidockyounhaphoe (Young Christian Association of North Korean Refugees), Hanayesunghwe and Bukhanjayuyounhap (North Korea Freedom Coalition), are religious organizations which target the population of North Korean defectors. Hanminjok-BokjiJaedan (One People Welfare Fund), Bukhaneumsikmunhwayonguwon are without religious affiliation but have the same purpose of providing services to North Korean defectors. YeomyeongHakgy and JayuteaHakgyo are academic institutions which seek to provide education for North Korean defectors. Talbujanminhwi (association of North Korean refugees) and Talbukja churches are formed by the defectors themselves and also served as starting points for gathering data. Making contact with all the aforementioned organizations and groups was the initial step of conducting this survey.

**Administration of the surveys.** Following the initial contact and agreement with the starting points were the administration of the survey itself. This was done through three different means. First, the researcher traveled to South Korea to directly work with organizations with access to the population of defectors. During this stay in South Korea, the researcher attended group meetings where the leaders of organizations and North Korean defectors were present. At such meetings, the researcher personally explained the purpose of study and the informed consent, and gave the instrument to those who meet the criteria of the sample population. By having direct contact with the researcher, North Korean defectors felt secure with participating in the survey and felt more inclined to provide honest disclosure of the details of their lives as refugees. The forgiveness-related measures and the most hurtful incident questionnaire were administered after all the other instruments in order to control for any possible effect of emotional arousal. The researcher remained present to answer any questions and to debrief with participants as
needed when they turn in their survey. For the period from January 22, 2012 to February 27, 2012, data were collected from 279 participants who met the criteria for the study.

**Selecting and training other survey administrators.** Second, when the researcher was unable to directly conduct the survey, the researcher worked through the method of facilitation through others. In the matter of selecting facilitators, the main qualifications were that the candidate was a North Korean defector who was currently residing in South Korea. He or she also had previous experience with conducting surveys of North Korean refugees. Candidates who meet both requirements were able to gain the trust of participants in the survey. Participants were more comfortable with participating and also had less insecurity with providing answers to the survey questions with a fellow defector with similar life experiences.

The researcher trained facilitators to work with the organizations that provided access to the sample population. Training provided through three 40-minute sessions. Sessions were one-on-one with the researcher to ensure each facilitator was fully prepared to conduct the survey on behalf of the researcher. The training of the facilitators was consist of providing basic education regarding the study’s essential information, informed consent, as well as mental health referrals that was provided to participants. After the provision of basic information, the facilitators proved their capability to conduct the survey correctly. The researcher provided feedback regarding each facilitator’s performance. The medium of training differ based upon each facilitator’s residence. Those who are living in South Korea were trained via video conferencing (using programs such as Skype and MSN Messenger). The instructions for the facilitator were given in the form of scripts (see Appendix W).
**Mailed survey.** In order to prevent a large percentage of error due to a participant’s inability to use the internet, only conventional mail was used for the purpose of this study. In addition to the survey itself, a self-addressed, stamped envelope was included for the participant’s convenience in returning the completed survey to the researcher.

Participants were provided with the contact information of the researcher, and their corresponding facilitator. This information was provided so that questions or concerns that arise while completing the survey can be addressed and resolved. The researcher and facilitators emphasize their accessibility to the study’s participants and provide any additional aid in regards to participants’ mental health. Mental health referrals were readily available for those who desire counseling.

**Compensation for participants.** To minimize inaccurate responses given by participants who may not respond to the survey questions with careful consideration, a compensation of 10,000 won ($10 USD) was given to each North Korean defector who participate in the survey. Since many North Koreans also have a low SES, this incentive appears reasonable to compensate them for the time they will take to complete the survey.

**Data Processing and Analysis**

The data was analyzed to insure that it meets the assumptions necessary for the completion of all statistical procedures. For data analysis, the Statistical Analysis System (SAS 9.3) and Linear Structural Relationships (LISREL 8.80) for Microsoft Windows (Jöreskog & Sörbom, 2006) were used. The next task was to complete preliminary analyses on the participants’ demographic information to obtain descriptive data on the sample.
The purpose of the survey research is to answer the following research questions by statistically testing their hypothesis:

Research Question 1: Will the Decisional Forgiveness Scale (DFS) and Emotional Forgiveness Scale (EFS) items lead to a psychometrically sound Korean Forgiveness Inventory?

Hypothesis 1: It is hypothesized that the psychometric data and the factor loadings of Forgiveness Scale (DFS) and Emotional Forgiveness Scale (EFS) items for the U.S. population would be suitable for the North Korean refugees.

If this is the case, then the psychometric factor structure and data of DFS and EFS will be consistent with psychometric and factor structure data of each instrument for the U.S. population.

Data Analysis: Cronbach’s Alphas and a confirmatory factor analysis will be performed on DFS and EFS for the North Korean refugees.

Research Question 2: Will social adjustment, forgiveness and religious commitment be inversely related with self-reported trauma and mood disorder for North Korean refugees? Hypothesis 2: It is hypothesized that social adaptation, forgiveness and religious commitment are negatively associated with self-reported trauma and mood disorder for North Korean refugees.

If this is the case, there will be a negative association between social adjustment level and trauma and mood disorder for North Korean refugees.

Data Analysis: A multiple regression analysis will be computed on the predictor variable of social adaptation with the criterion variable of self-reported depression and trauma symptoms.
Research Question 3: Will religious commitment and forgiveness be positively related with social adjustment for North Korean refugees?

Hypothesis 3: It is hypothesized that religious commitment and forgiveness are positively associated with social adjustment for North Korean refugees.

If this is the case, there will be a positive association between religious commitment level and mental health status; more religiously committed participants are likely to be healthier than those who are less religiously committed.

Data Analysis: A multiple regression analysis will be computed on the predictor variable of religious commitment with the criterion variable of self-reported depression and trauma symptoms.

Research Question 4: Will unforgiveness variables and hurt characteristics positively predict self-reported trauma and depression symptoms in North Korean refugees while religious commitment and forgiveness variables inversely predict self-reported trauma and depression symptoms?

Hypothesis 4-1: It is hypothesized that unforgiveness and hurt characteristics are positively associated with self-reported trauma and depression symptoms in North Korean refugees.

Data Analysis: A multiple regression analysis will be computed on the predictor variable of unforgiveness and hurt characteristics with the criterion variable of self-reported depression and trauma symptoms.

Hypothesis 4-2: It is hypothesized that religious commitment and forgiveness variables are negatively associated with self-reported trauma and depression symptoms.

If this is the case, there will be a positive correlation between unforgiveness and
self-reported trauma and depression symptoms and there will be a negative correlation between religious commitment and trauma and depression symptoms in North Korean refugees.

Data Analysis: A multiple regression analysis will be computed on the predictor variable of religious commitment and forgiveness variables with the criterion variable of self-reported depression and trauma symptoms.

Research Question 5: Out of the variables explored in this study (religious commitment, forgiveness, and hurt characters) will unforgiveness variables be the strongest predictor of PTSD and depression symptoms?

Hypothesis 5: It is hypothesized that unforgiveness variables would be the most influential variable of PTSD and depression symptoms compared to the other variables: religious commitment, forgiveness, and hurt characteristics.

Data Analysis: A multivariate regression analysis will be performed to identify the most significant predictors of the mental health outcomes of the North Korean refugees.

**Ethical considerations.** In order to ethically conduct the current study, several strategies were employed. First, the purpose of the study and the subjects’ rights were disclosed on the first page of the questionnaire. Additionally, informed consent form and contact information of the researcher were given in case of emerging additional questions. Referral information for mental health services was included. Second, confidentiality was thoroughly explained on the questionnaire and the survey does not ask private questions such as name, address, or contact number. All data collected from the sample was used for the current research purpose and was not distributed. Third, the collected data was stored in the researcher’s computer with password protection. Only the investigator and...
the faculty sponsor had the access code to the data. Hard copies of research records were kept in a locked file.

**Summary**

In order to investigate the influence of social adaptation, religious commitment, unforgiveness, and forgiveness style on the self-reported mental health of North Korean defectors by multiple regression analyses, this study utilized a survey design. The independent variables are social adaptation, religious commitment, unforgiveness, hurt characteristics, and forgiveness style, and the dependent variable is mental health status. For this study North Korean refugees in South Korea and the U.S. were recruited through educational institutions, religious organizations, local welfare agencies, North Korean refugee church and associations of North Koran refugees. The population of North Korean defectors was relatively small and dispersed. To handle this problem, the researcher used a snowballing strategy to gather data through a wide range of various starting points to avoid a homogenous and skewed data set. In order to ethically conduct the current study, the purpose of the study and the subjects’ right were disclosed. Also, confidentiality was thoroughly explained on the questionnaire and the survey does not ask private questions such as name, address, or contact number. Using SAS 9.2, SPSS and LISREL 8.80 were recommended for examining the hypotheses and testing the hypothesized model.
CHAPTER FOUR: RESULTS

The purpose of this study was to explore the relationship among social adaptation, religious commitment, unforgiveness, forgiveness style and self-reported mental health among the North Korean refugees. To reach the purpose, the presented study was divided into two parts and five research questions were presented. For the first part, (1) will the Decisional Forgiveness Scale (DFS) and Emotional Forgiveness Scale (EFS) items lead to a psychometrically sound Korean Forgiveness Inventory? It is tested by conducting Confirmatory Factor Analyses. For the second part, four questions are addressed: (2) Will social adjustment, forgiveness and religious commitment be inversely related to trauma and mood disorder for North Korean refugees? (3) Will religious commitment and forgiveness be positively related to social adjustment for North Korean refugees? (4) Will high levels on unforgiveness and hurt characteristics be positively related to self-reported trauma and depression symptoms in North Korean refugees while high religious commitment and high levels of forgiveness variables predict low levels of self-reported trauma and depression symptoms? (5) Out of the variables explored in this study (social adaptation, religious commitment, forgiveness, and hurt characteristics) will unforgiveness be the strongest predictor of PTSD and depression symptoms? To answer the part 2 research questions, the present study conducted multiple regression analyses. SAS 9.3 was utilized for descriptive statistics and multiple regression analysis.

This chapter contains the preliminary analysis of the structure of the variables, the results of each research question and the results of the hypotheses testing. The preliminary analyses
encompassed descriptive statistics of demographic data and descriptive statistics of variables. Prior to conducting the primary statistical analyses, the data were checked for missing data, outliers, and normality. A total of 279 cases in the initial data were collected and 7 cases had a large amount of missing data, which were deleted from the analysis. Three cases of them were deleted for giving the same answer to every question. As a result, the final sample size was 269.

After screening the invalid cases, the reverse items were corrected for their value.

**The Preliminary Analyses of the Data**

The sample in the current study consisted of 269 participants whose mean age was 40.53 (SD=11.31, range = 19 – 70). The ages of the subjects were widely distributed from 19 to 70. The majority of participants were female (n=172, 63.94%) but there were 97 male participants (36.06%). Among 269 participants involved in this study 262 were from South Korea, and seven were from Virginia, the United States.

Regarding marital status, 31.84 % (n=85) of the sample were married in North Korea and defected alone, 26.22% (n=70) were single (never married), 15.73% (n=42) were married in North Korea and defected with their spouse, 10.86% (n=29) were married in South Korea, 5.24% (n=14) were widowed, 4.87% (n=13) were divorced in South Korea, 4.49% (n=12) were other, 0.75% (n=2) of sample were widower.

Concerning religious preference, 68 % (n=184) of the sample answered that they were Protestants; 1.49% (n= 4) responded they are Buddhists; .37% (n= 1) reported Confucianism; 29% (n= 78) of the sample answered they don’t have a religion. The subjects’ entry-related characteristics were investigated according to their length of stay
in North Korea, overseas and South Korea. The length of stay in North Korea averaged 32.02 years, 2.61 years in other country and 5.93 years in South Korea.

Regarding reasons to escape from North Korea, 73.61% \((n=198)\) of the sample answered the question. The reasons included “hunger and food shortages”: 22.30% \((n=60)\); “political system of North Korea or communist ideology of North Korea”: 15.99% \((n=43)\); “worry about punishment of political misconduct”: 11.15% \((n=30)\) “desire to reunite with family in South Korea”: 12.27% \((n=33)\); “desire to have economic opportunity” and 23.05% \((n=62)\) “other reasons”.

Also, the situations of transgression that were described by the severity of their experienced hurt from North Korean regime (Hurt Severity), level of support with North Korean government before and after the hurt experience (Pre-Closeness, Post-Closeness), and the time duration since the hurt (Duration) were also analyzed (Table 2). The mean score of Hurt Severity was 4.08 (SD=1.13) and duration since hurt is 9.70 years. The mean score of support with North Korean government before the hurt experience was 3.46 (SD=1.255) and the score of support after the hurt experience was 1.94 (SD=.934).

Concerning types of hurt (traumatic events), the event with the highest frequency of extremely hurtful (5) was “eyewitness to a family member, relative, or close neighbor dying of starvation” \((n=120)\), followed by “inability to help a family member or relative who suffered or has died from a disease”\((n=110)\), “eye witnessing to the punishment of an acquaintance for political misconduct”\((n=105)\)”, “agony over family’s political background (eg., parents who defected from South Korea) \((n=101)\)”, “eyewitness to a public execution of a non-family member or relative” \((n=95)\), “punishment for a family
member's or relative's political misconduct (non-public execution)” \((n=72)\), and “eyewitness to a public execution of family member or relative” \((n=66)\).

The mean item scores, standard deviations, ranges, numbers of respondents and standardized Cronbach’s alpha for each predictor, mediator, and criterion variable in the model are presented in Table 1. As shown in Table 1, the mean item scores of all latent variables (Social Adaptation, Religious Commitment, Forgiveness Unforgiveness and types of Hurt) are moderately high. In the case of the mean score of unforgiveness the scores were higher than all other scales. Even though most of the instruments were translated from English version to Korean one, the standardized Cronbach’s coefficient alphas were significantly high in most of the scale. Cronbach Coefficient Alpha for RCI-10 was .98. In Chong’s study (2009), Coefficient alpha of .944 was reported. Worthington et al. (2003) obtained coefficient alpha .95 for the client sample.

Table 3 presents the correlations among variables. The highest correlation coefficients were .93 between the Interpersonal and Intrapersonal Religious Commitment. Compared to Worthington and his colleagues’ result \(r=.72\), this suggests that the two subscales may be measuring one common construct of North Korean defectors. The second highest correlation coefficients were between DFS and EFS \(r=.74\). The correlation coefficients were between trauma (TSNKR) and depression (CES-D) symptoms \(r=.63\). This suggests that depression to be the most prevalent comorbid psychiatric disorder with PTSD (Creamer, Burgess, & McFarlane, 2001; Kessler, Sonnega, Hughes, & Nelson, 1995) and after a traumatic event the possibility of developing depression, along with PTSD increases (Leaman, 2009).
### Table 1

**Descriptive statistics**

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<th>Variable</th>
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<th>Std</th>
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### Table 2

**Correlations for Hurt Severity, Pre-Closeness, Post-Closeness and Duration.**

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Table 3  
Correlations among variables

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<td>Trauma</td>
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</tr>
<tr>
<td>15 CES-D Depression</td>
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</tr>
</tbody>
</table>

***p < .001
Research Question One

Estimated reliability of DFS. A Confirmatory Factory Analysis (CFA) was performed to examine the factor structure of the North Korean version of the DFS. The item means range from 2.552 to 3.152 and the standard deviation from 1.094 to 1.228 (Table 4). Seven items are positive but one item is negative. The results showed that the DFS scale for North Korean defector sample demonstrated adequate internal consistency (Cronbach alpha = .814). Chong (2009) reported Coefficient alpha of DFS was .793 with a South Korean sample. Concerning the inter-item correlations, the average inter-item correlation is .338 with values ranging from -.280 to .770. Six items were higher than .50. The variance of the inter-item correlations appears to be small at .0116. The strongest correlation was between Item 6 and 7 (r=.770). The scale mean is 21.345 with a standard deviation of 6.196 and the item variance is ranging from 1.374 to 1.510 (Table 5).

According to Hu and Bentler’s (1999) “two criteria” strategy, at least two other types of fit indices should be applied to the CFA in addition to the exact index. Therefore, GFI (exact index), CFI (incremental fit index) (Bentler, 1990) and RMSEA, (approximate fit index) (Steiger, 1980) were used to determine the model fit. The results of the CFA for the North Korean version of the DFS revealed a poor model fit (CFI=.923, GFI=.880, RMSEA=.153). A reasonable model fit is generally defined as CFI≥.90, GFI≥.90, and RMSEA≤.08 (Hau, Marsh & Wen, 2004; Thompson, 2004).

Several criteria were considered in selecting which items to delete, including low factor loading (less than .50), item-to-item correlation, and Cronbach’s alpha. Item 5 and 8 were found to have a factor loading of less than .50. Most of the item-to-item correlations for these items were low ranging from -0.21 to 0.08 for item 5 and from .27
to .50 for item 8 (Table 7). The statement of item 5, 8 were “I will try to act toward the North Korean government leaders in the same way I did before they hurt me”, “I will not seek revenge upon North Korean government leaders. Actually, item 5 and 8 were regarded as unstable items among the South Korean sample in the Chong’s study (2009) as well and were recommended to be removed from future South Korean studies using the instrument. After deleting items 5 and 8, the model fit was good (CFI=.999, GFI=.992, RMSEA=.031). (see Table 9).

In summary of the above analyses, the goodness of fit of the CFA model among the North Korean defectors sample on DFS proved to be a poor fit for the two-factor model. However, an acceptable model fit was obtained after removing items 5 and 8 for the North Korean defectors.

<table>
<thead>
<tr>
<th>Table 4</th>
</tr>
</thead>
</table>

*Item Statistics of DFS*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std De</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFS 1</td>
<td>269</td>
<td>2.4237</td>
<td>1.19652</td>
<td>652</td>
</tr>
<tr>
<td>DFS 2</td>
<td>268</td>
<td>2.5373</td>
<td>1.15895</td>
<td>680</td>
</tr>
<tr>
<td>DFS 3</td>
<td>269</td>
<td>2.4832</td>
<td>1.09472</td>
<td>668</td>
</tr>
<tr>
<td>DFS 4</td>
<td>268</td>
<td>2.5522</td>
<td>1.22745</td>
<td>684</td>
</tr>
<tr>
<td>DFS 5</td>
<td>268</td>
<td>3.1529</td>
<td>1.14938</td>
<td>845</td>
</tr>
<tr>
<td>DFS 6</td>
<td>269</td>
<td>2.6988</td>
<td>1.22871</td>
<td>726</td>
</tr>
<tr>
<td>DFS 7</td>
<td>269</td>
<td>2.7918</td>
<td>1.17870</td>
<td>751</td>
</tr>
<tr>
<td>DFS 8</td>
<td>269</td>
<td>2.7137</td>
<td>1.13782</td>
<td>730</td>
</tr>
</tbody>
</table>
Table 5

*Scale Statistics of DFS*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Variance</th>
<th>Std. Dev.</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21.345</td>
<td>38.394</td>
<td>6.196</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 6

*Summary Item Statistics of DFS*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Range</th>
<th>Max/Min</th>
<th>Variance</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Means</td>
<td>2.669</td>
<td>2.424</td>
<td>3.153</td>
<td>0.729</td>
<td>1.301</td>
<td>0.054</td>
<td>8</td>
</tr>
<tr>
<td>Item variances</td>
<td>1.374</td>
<td>1.198</td>
<td>1.510</td>
<td>0.311</td>
<td>1.260</td>
<td>0.011</td>
<td>8</td>
</tr>
<tr>
<td>Inter-Item Correlations</td>
<td>0.348</td>
<td>-0.280</td>
<td>0.770</td>
<td>1.050</td>
<td>-2.750</td>
<td>0.116</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 7

*Inter-Item Correlation Matrix of DFS*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Item 1</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2: Item 2</td>
<td>0.75432</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3: Item 3</td>
<td>0.37576</td>
<td>0.32467</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4: Item 4</td>
<td>0.73117</td>
<td>0.59332</td>
<td>0.32498</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5: Item 5</td>
<td>-0.21966</td>
<td>-0.18882</td>
<td>0.08634</td>
<td>-0.22336</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6: Item 6</td>
<td>0.76477</td>
<td>0.68030</td>
<td>0.39154</td>
<td>0.74947</td>
<td>-0.28403</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7: Item 7</td>
<td>0.59986</td>
<td>0.63786</td>
<td>0.35008</td>
<td>0.61222</td>
<td>-0.26810</td>
<td>0.77069</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8: Item 8</td>
<td>0.39914</td>
<td>0.30097</td>
<td>0.50390</td>
<td>0.27047</td>
<td>0.04155</td>
<td>0.41319</td>
<td>0.25588</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 8

*Factor loadings of the items of DFS*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loadings</th>
</tr>
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<tbody>
<tr>
<td>Item 1</td>
<td>1.025</td>
</tr>
<tr>
<td>Item 2</td>
<td>.902</td>
</tr>
<tr>
<td>Item 3</td>
<td>.476</td>
</tr>
<tr>
<td>Item 4</td>
<td>.989</td>
</tr>
<tr>
<td>Item 5</td>
<td>-.301</td>
</tr>
<tr>
<td>Item 6</td>
<td>1.127</td>
</tr>
<tr>
<td>Item 7</td>
<td>.929</td>
</tr>
<tr>
<td>Item 8</td>
<td>.482</td>
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</tbody>
</table>

*Note.* CFI=.923, GFI=.880 RMSEA=.153

Table 9

*Goodness-of-Fit Indices for the DFS With Different Item Deletions*

<table>
<thead>
<tr>
<th>Item Deleted</th>
<th>Comparative Fit Index (CFI)</th>
<th>Goodness of Fit Index (GFI)</th>
<th>Root Mean Square Error of Approx. (RMSEA)</th>
<th>Root Mean Square Residual (RMR)</th>
<th>Non-Normed Fit Index (NNFI)</th>
<th>df</th>
<th>Minimum Fit Function χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0.923</td>
<td>0.880</td>
<td>0.153</td>
<td>0.098</td>
<td>0.892</td>
<td>20</td>
<td>153.223</td>
</tr>
<tr>
<td>5</td>
<td>0.929</td>
<td>0.888</td>
<td>0.166</td>
<td>0.090</td>
<td>0.894</td>
<td>14</td>
<td>131.092</td>
</tr>
<tr>
<td>5, 8</td>
<td><strong>0.999</strong></td>
<td><strong>0.992</strong></td>
<td><strong>0.031</strong></td>
<td><strong>0.017</strong></td>
<td><strong>0.997</strong></td>
<td><strong>5</strong></td>
<td><strong>6.497</strong></td>
</tr>
<tr>
<td>5, 8, 3</td>
<td>0.997</td>
<td>0.991</td>
<td>0.086</td>
<td>0.020</td>
<td>0.983</td>
<td>2</td>
<td>6.245</td>
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</table>

**Estimated reliability of EFS.** The item means of EFS were ranging from 1.697 to 2.691 (Table 10) and standard deviation from .949 to 1.242. The scale mean was 19.236 with a standard deviation of 5.601. All the items had correlations with total scores. All items were positive and the item variance was ranging from .901 to 1.541 (Table 13). The Cronbach Coefficient Alpha of .782 was reported. Concerning the inter-
item correlations, the inter-item correlations were positive, most of the inter-item correlations were below .50 while there were a few that were much higher than .50 (Table 13). The average inter-item correlation was .311 with values ranging from .080 to .600. The strongest correlation was between item 5 and item 3 (r=.509). The variance of the inter-item correlations appears to be small at .015 (Table 12). The goodness of fit of the CFA model for EFS was evaluated using CFI, GFI and RMSEA, but the CFA proved to be a poor fit with all the eight items (CFI=.836, GFI=.856, RMSEA=.173) (Table 15).

For a better set of fit indices, several item combination were considered in selecting which items to delete, including low factor loading, item-to-item correlation, and Cronbach’s alpha. In Chong’s study (2009), items 13, 15 were removed to improve the model. However after removing Items 13, 15, the result was still a poor model fit (CFI=.894, RMSEA=.153).

In the current study, the model removing item 14, 9, 12, 10 was revealed as the best model fit with the data (CFI=0.999, GFI= 0.996, RMSEA=0.021) (Table 15). In order for this instrument to be used for North Korean defectors, adaptation of items may be needed.
Table 10

*Item Statistics of EFS*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std De</th>
<th>Sum</th>
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</thead>
<tbody>
<tr>
<td>EFS 9</td>
<td>269</td>
<td>2.6394</td>
<td>1.20326</td>
<td>710</td>
</tr>
<tr>
<td>EFS 10</td>
<td>269</td>
<td>2.5873</td>
<td>1.00965</td>
<td>696</td>
</tr>
<tr>
<td>EFS 11</td>
<td>269</td>
<td>2.6914</td>
<td>1.03554</td>
<td>724</td>
</tr>
<tr>
<td>EFS 12</td>
<td>269</td>
<td>2.2156</td>
<td>1.08843</td>
<td>596</td>
</tr>
<tr>
<td>EFS 13</td>
<td>269</td>
<td>2.5055</td>
<td>1.13828</td>
<td>674</td>
</tr>
<tr>
<td>EFS 14</td>
<td>269</td>
<td>1.6977</td>
<td>0.94911</td>
<td>455</td>
</tr>
<tr>
<td>EFS 15</td>
<td>269</td>
<td>2.4237</td>
<td>1.19340</td>
<td>652</td>
</tr>
<tr>
<td>EFS 16</td>
<td>269</td>
<td>2.4721</td>
<td>1.24145</td>
<td>665</td>
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</table>

Table 11

*Scale Statistics of EFS*

<table>
<thead>
<tr>
<th>Mean</th>
<th>Variance</th>
<th>Std. Dev.</th>
<th>N of Items</th>
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</thead>
<tbody>
<tr>
<td>19.236</td>
<td>31.374</td>
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</table>

Table 12

*Summary Item Statistics of EFS*

<table>
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<tr>
<th></th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Range</th>
<th>Max/ Min</th>
<th>Variance</th>
<th>N of Items</th>
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<tbody>
<tr>
<td>Item Means</td>
<td>2.404</td>
<td>1.698</td>
<td>2.691</td>
<td>0.994</td>
<td>1.585</td>
<td>0.103</td>
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</tr>
<tr>
<td>Item variances</td>
<td>1.236</td>
<td>0.901</td>
<td>1.541</td>
<td>0.640</td>
<td>1.711</td>
<td>0.052</td>
<td>8</td>
</tr>
<tr>
<td>Inter-Item Correlations</td>
<td>0.311</td>
<td>0.080</td>
<td>0.600</td>
<td>0.520</td>
<td>7.500</td>
<td>0.015</td>
<td>8</td>
</tr>
</tbody>
</table>
Table 13

*Inter-Item Correlation Matrix of EFS*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Item 1</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2: Item 2</td>
<td>0.4576</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>3: Item 3</td>
<td>0.07508</td>
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<td></td>
</tr>
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<td>4: Item 4</td>
<td>0.35019</td>
<td>0.42081</td>
<td>0.15194</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5: Item 5</td>
<td>0.15812</td>
<td>0.33155</td>
<td>0.50953</td>
<td>0.27912</td>
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</tr>
<tr>
<td>6: Item 6</td>
<td>0.18172</td>
<td>0.28790</td>
<td>0.20071</td>
<td>0.36744</td>
<td>0.19235</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>7: Item 7</td>
<td>0.20556</td>
<td>0.41819</td>
<td>0.39002</td>
<td>0.31145</td>
<td>0.59981</td>
<td>0.24579</td>
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<td></td>
</tr>
<tr>
<td>8: Item 8</td>
<td>0.39915</td>
<td>0.34950</td>
<td>0.28208</td>
<td>0.44906</td>
<td>0.32951</td>
<td>0.33444</td>
<td>0.23216</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 14

*Factor loadings of the items of EFS*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>.558</td>
</tr>
<tr>
<td>Item 2</td>
<td>.637</td>
</tr>
<tr>
<td>Item 3</td>
<td>.502</td>
</tr>
<tr>
<td>Item 4</td>
<td>.635</td>
</tr>
<tr>
<td>Item 5</td>
<td>.733</td>
</tr>
<tr>
<td>Item 6</td>
<td>.424</td>
</tr>
<tr>
<td>Item 7</td>
<td>.775</td>
</tr>
<tr>
<td>Item 8</td>
<td>.718</td>
</tr>
</tbody>
</table>

*Note.* CFI=.836, GFI=.856 RMSEA=.173
Table 15

*Goodness-of-Fit Indices for the EFS With Different Item Deletions*

<table>
<thead>
<tr>
<th>Item Deleted</th>
<th>Comparative Fit Index (CFI)</th>
<th>Goodness of Fit Index (GFI)</th>
<th>Root Mean Square Error of Approx. (RMSEA)</th>
<th>Root Mean Square Residual (RMR)</th>
<th>Non-Normed Fit Index (NNFI)</th>
<th>df</th>
<th>Minimum Fit Function $\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0.836</td>
<td>0.856</td>
<td>0.173</td>
<td>0.116</td>
<td>0.770</td>
<td>20</td>
<td>152.605</td>
</tr>
<tr>
<td>14</td>
<td>0.820</td>
<td>0.849</td>
<td>0.202</td>
<td>0.130</td>
<td>0.730</td>
<td>14</td>
<td>136.529</td>
</tr>
<tr>
<td>14, 9</td>
<td>0.870</td>
<td>0.905</td>
<td>0.177</td>
<td>0.108</td>
<td>0.784</td>
<td>9</td>
<td>78.086</td>
</tr>
<tr>
<td>14, 9, 12</td>
<td>0.938</td>
<td>0.962</td>
<td>0.127</td>
<td>0.070</td>
<td>0.876</td>
<td>5</td>
<td>28.746</td>
</tr>
<tr>
<td><strong>14, 9, 12, 10</strong></td>
<td><strong>0.999</strong></td>
<td><strong>0.996</strong></td>
<td><strong>0.021</strong></td>
<td><strong>0.027</strong></td>
<td><strong>0.998</strong></td>
<td>2</td>
<td><strong>2.207</strong></td>
</tr>
</tbody>
</table>

**Research Question Two**

Will social adjustment, forgiveness and religious commitment be inversely related with self-reported trauma and mood disorder for North Korean refugees? For this question one hypothesis was established in this study. Social adaptation, forgiveness and religious commitment are negatively associated with self-reported trauma and mood disorder for North Korea refugees. The hierarchical multiple regression analysis was computed on the predictor variable of religious commitment, forgiveness, and social adaptation with the criterion variable of trauma symptoms using adapted North Korean version of the DFS and EFS (Table 16).

In the order with which the variables were input in the Multiple Regression analysis, the religious variable (RCI) was inputted first because there was limited research on religious variables and forgiveness was regarded to impact less directly on mental health than forgiveness and social adjustment for North Korean refugees.
In Step 1, the analysis with religious commitment input as the only independent variable on the dependent of trauma symptom suggests that the coefficient of multiple determination ($R^2$) between the variables of Religious commitment (RCI) and Trauma was .002. Religious commitment (Intrapersonal RC -RCI-1, Interpersonal RC- RCI-2) was not found to be significantly associated with trauma in Step 1. In Step 2, another predictor variable of forgiveness was included in the analysis. Interpersonal Religious Commitment (RCI-2) was found to be significantly negatively associated with trauma. However intrapersonal religious commitment (RCI-1) and trauma symptom were positively associated.

The relationship with the DFS-NK is more strongly correlated than the relationship with the EFS-NK. In Step 2, the Parameter estimates score of Intrapersonal Religious commitment (RCI-1) increased from .145 to .191 and the Parameter estimates score of Interpersonal Religious Commitment (RCI-2) increased from -.147 to -.170 as the significant factor. $R^2$ score increased from .0002- to .257 in Step 2.

In step 3, another predictor variable of social adaptation was included in the analysis. For examining the effect of social adaptation on trauma symptom, the result suggests that social adaptation was not found to be significantly associated with trauma symptoms (Parameter estimates= -.167).

The hierarchical multiple regression analysis was computed on the predictor variable of religious commitment, forgiveness (using adapted North Korean version of the DFS and EFS) and social adaptation with the criterion variables of mood disorder (CES-D) (Table 17). In Step 1, the analysis with religious commitment as the only the independent variable on mood disorder (CES-D), religious commitment was not found to
be significantly negatively associated with mood disorder. In Step 2, Forgiveness variable (DFS, EFS) accumulated to Step 1, DFS was reported to be weakly negatively correlated in magnitude (Parameter estimates= -.078) and EFS was not found to be associated with mood disorder. The $R^2$ score increased from .005 to .046 in Step 2. Finally, the predictor variable of social adaptation was included in the analysis. Social adaptation was found to be significantly negatively associated with depression symptom (Parameter estimates= -.486). The $R^2$ score increased from .046 to .205 in Step 3.

In sum, across the models, decisional forgiveness (DFS-NK) was the main negative predictive factor for trauma symptoms, suggesting individuals who are more likely to forgive are experiencing lower levels of trauma. Social adaptation was the main predictive factor for depression symptom, suggesting participants who are more socially adapted are experiencing a lower level of depressive mood disorder.

**Research Question Three**

Will religious commitment and forgiveness be positively related with social adjustment for North Korean refugees? To answer this question, it was hypothesized that religious commitment and forgiveness would be positively associated with social adjustment for North Korean refugees. The correlations between these scales were analyzed with modified DFS and EFS items. The result is listed in Table 18. Consistent with the hypothesis, religious commitment, both Intrapersonal Religious Commitment and Interpersonal Religious Commitment, was found to be significantly positively associated with social adjustment. This indicates that more religiously committed participants are likely to be more socially adjusted than those who are less religiously committed. However forgiveness was not found to be associated with social adjustment.
Table 16

Hierarchical multiple regression analysis: Predicting North Korean Trauma from Religious commitment, Forgiveness and Social Adaptation

<table>
<thead>
<tr>
<th>Step</th>
<th>Criterion variables</th>
<th>Predictor Variables</th>
<th>Parameter estimates</th>
<th>Adj. $R^2$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trauma (TSNKR)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) RCI2 (Inter)</td>
<td>0.1453</td>
<td>0.1478</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Trauma (TSNKR)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) RCI2 (Inter)</td>
<td>0.1914*</td>
<td>0.1703*</td>
</tr>
<tr>
<td></td>
<td>Forgiveness</td>
<td>DFS-NK EFS-NK</td>
<td>-</td>
<td>0.2889***</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Trauma (TSNKR)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) RCI2 (Inter)</td>
<td>0.2096*</td>
<td>0.1782*</td>
</tr>
<tr>
<td></td>
<td>Forgiveness</td>
<td>DFS-NK EFS-NK</td>
<td>-</td>
<td>0.2832***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social adaption</td>
<td>SASS</td>
<td>-</td>
<td>0.1676</td>
<td></td>
</tr>
</tbody>
</table>

Notes. * $p < .05$, *** $p < .001$
Table 17

Hierarchical multiple regression analysis: Predicting North Korean Depression from Religious commitment, Forgiveness and Social Adaptation

<table>
<thead>
<tr>
<th>Step</th>
<th>Criterion variables</th>
<th>Predictor Variables</th>
<th>Parameter estimates</th>
<th>Adj. R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Depression (CES-D)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) RCI2 (Inter)</td>
<td>0.0030</td>
<td>-0.0057</td>
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<td></td>
<td></td>
<td></td>
<td>- 0.0167</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Depression (CES-D)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) RCI2 (Inter)</td>
<td>0.0161</td>
<td>0.0466</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- 0.0230</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Forgiveness</td>
<td>DFS-NK</td>
<td>- 0.0784*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EFS-NK</td>
<td>- 0.0406</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Depression (CES-D)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) RCI2 (Inter)</td>
<td>0.0690</td>
<td>0.2052</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- 0.0457</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Forgiveness</td>
<td>DFS-NK</td>
<td>- 0.0620</td>
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<tr>
<td></td>
<td></td>
<td>EFS-NK</td>
<td>- 0.0682</td>
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<tr>
<td></td>
<td>Social adaption</td>
<td>SASS</td>
<td>- 0.4869***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. *** p < .001

Table 18

Correlations among variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>1 SASS</td>
<td>2.0295</td>
<td>0.3562</td>
<td>0.2186</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>***</td>
</tr>
<tr>
<td>2 RCI-1(intra)</td>
<td>2.5582</td>
<td>1.2121</td>
<td>0.9330</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>***</td>
</tr>
<tr>
<td>3 RCI-2(Inter)</td>
<td>2.6357</td>
<td>1.2586</td>
<td>0.0738</td>
</tr>
<tr>
<td>4 DFS-NK</td>
<td>2.5809</td>
<td>0.9542</td>
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</tr>
<tr>
<td>5 EFS-NK</td>
<td>2.5232</td>
<td>0.8468</td>
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</tr>
</tbody>
</table>

Notes: N = 269, NK: North Korean version. ** p < .01
Research Question Four

Will unforgiveness variables and hurt characteristics positively predict self-reported trauma and depression symptoms in North Korean refugees while religious commitment and forgiveness variables inversely predict self-reported trauma and depression symptoms? To answer this question, two hypotheses were evaluated. Hypothesis 1 states that unforgiveness and hurt characteristics are positively associated with self-reported trauma and depression symptoms. Hypothesis 2 states that religious commitment and forgiveness variables are negatively associated with self-reported trauma and depression symptoms.

Hypothesis 4-1. Unforgiveness was identified with the scores of TRIM-R, TRIM-A-NK, and RIO-NK. Hurt characteristics were identified with the scores of Hurt Severity, Duration of Hurt, and Types of Hurt. To test these hypothesis, correlation analysis was computed on the independent variable of Unforgiveness and hurt characteristics with the dependent variable of mental health status. The correlation matrix with coefficient values is presented in Table 19. Correlation reveals that both unforgiveness and hurt characteristics are found to be significantly positively associated with trauma and depression. This indicates that participants with higher scores on unforgiveness will have higher self-reported depression and trauma symptom and participants with higher scores on severity of hurt experience will have higher trauma and depression symptoms.

The severity of their experienced hurt (Hurt Severity) was suggested to be the significant factor for trauma and mood disorder. Level of support for North Korean leaders before the hurt experience (Pre-Closeness) was suggested to be the significant factor for depression and the Level of support with North Korean leaders after the hurt
experience (Post-Closeness) was a significant factor for trauma symptoms.

Table 19

**Mean, Standard Deviations, and Intercorrelations for Unforgiveness and Hurt Characteristic and Mental Health.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hurt Severity</td>
<td>269</td>
<td>4.082</td>
<td>1.133</td>
<td>0.347</td>
<td>0.370</td>
<td>-0.134</td>
<td>0.217</td>
<td>0.463</td>
<td>0.321</td>
<td>0.358</td>
<td>0.308</td>
<td>0.197</td>
</tr>
<tr>
<td>2 Duration hurt</td>
<td>262</td>
<td>9.700</td>
<td>11.353</td>
<td>0.270</td>
<td>0.128</td>
<td>0.021</td>
<td>0.109</td>
<td>0.117</td>
<td>0.149</td>
<td>-0.078</td>
<td>-0.003</td>
<td></td>
</tr>
<tr>
<td>3 Pre-Closeness</td>
<td>268</td>
<td>3.455</td>
<td>1.255</td>
<td>0.288</td>
<td>-0.090</td>
<td>0.994</td>
<td>-0.059</td>
<td>0.192</td>
<td>0.091</td>
<td>0.124</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Post-Closeness</td>
<td>268</td>
<td>1.940</td>
<td>0.934</td>
<td>-0.350</td>
<td>-0.267</td>
<td>-0.409</td>
<td>-0.142</td>
<td>-0.330</td>
<td>-0.002</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5 T_HURT</td>
<td>269</td>
<td>3.320</td>
<td>1.122</td>
<td>0.393</td>
<td>0.492</td>
<td>0.338</td>
<td>0.343</td>
<td>0.168</td>
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<td></td>
</tr>
<tr>
<td>6 RIO-NK</td>
<td>269</td>
<td>3.382</td>
<td>0.897</td>
<td>0.535</td>
<td>0.463</td>
<td>0.567</td>
<td>0.400</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 TRIM-R</td>
<td>269</td>
<td>3.945</td>
<td>0.936</td>
<td>0.490</td>
<td>0.404</td>
<td>0.210</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 TRIM-A-NK</td>
<td>269</td>
<td>3.715</td>
<td>1.066</td>
<td>0.407</td>
<td>0.234</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 TSNKR</td>
<td>269</td>
<td>2.249</td>
<td>0.675</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.627</td>
<td></td>
</tr>
<tr>
<td>10 CES-D</td>
<td>269</td>
<td>2.065</td>
<td>0.422</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. NK: North Korean version. *** p < .001

**Hypothesis 4-2.** It was hypothesized that religious commitment and forgiveness variables are negatively associated with self-reported trauma and depression symptoms.

The correlation analysis shows the forgiveness total score and subscales for DFS and EFS, all were found to be significantly negatively associated with both trauma and depression symptoms (Table 20). This indicates that more forgiving participants show less signs of trauma and depression symptoms. However, as the current study tested Hypothesis 2 with the hierarchical multiple regression analysis, religious commitment was not found to be associated with trauma and depression symptoms with a simple linear regression analysis.
In sum, unforgiveness and hurt characteristics are found to be significantly positively associated with trauma and depression; however, religious commitment was not found to be associated with trauma and depression.

**Research Question Five**

Out of the variables explored in this study (social adaptation, religious commitment, forgiveness, and hurt characteristics) will unforgiveness variables be the strongest predictor of trauma and depression symptoms? For examining the strongest predictor of trauma and depression symptoms, a simple linear regression analysis was calculated. Unforgiveness was identified with the scores of TRIM-R, TRIM-A-NK, and RIO-NK. As hypothesized, unforgiveness variables were found as the most predictive factor of both trauma and depression symptoms compared to the other variables: religious commitment, forgiveness, and hurt characteristics. As an indicator of unforgiveness, rumination about the experience of transgressions was found to be the most significant predictor of both trauma ($r = .567, p < .001$) and mood disorder ($r = .400, p < .001$) in the current study. The severity of their experienced hurt (Hurt Severity) from the North Korean government also was suggested to be the significant factor for trauma and mood disorder ($r = .308, p < .001$). Level of support with the North Korean government before the hurt experience (Pre-Closeness) was suggested to be the significant factor for depression ($r = .124, p < .001$), and the the level of support with North Korean government after the hurt experience (Post-Closeness) was the significant factor for trauma symptoms ($r = .330, p < .001$).

The hierarchical multiple regression analysis was computed in research question 5 to find out the differences among the effects of the subscales of unforgiveness (RIO,
TRIM-R, TRIM-A-NK) (see Table 21, 22). In the order with which the variables were inputted into the Multiple Regression analysis, Religious Commitment was inputted first then the Hurt Severity, then the subscales of Unforgiveness (RIO-NK, TRIM-R, TRIM-A) then Forgiveness and Social adaptation. Variables were entered by their chronological order of occurrence. The rationale for this order of entry is that it follows what naturally occurs in the participants.

In Step 1, religious commitment input as the only independent variable on the dependent of trauma symptom. In Step 2, another predictor variable of Hurt Severity was included in the analysis. For examining the effect of Hurt Severity on trauma symptom, the result suggests that Hurt Severity was found to be significantly associated with trauma symptoms (Parameter estimates= .182).

In step 3 where the unforgiveness factors including RIO-NK, TRIM-R and TRIM-A-NK were accumulated to step 2, rumination was the most powerful factor of unforgiveness for trauma symptoms (Parameter estimates= .328). Parameter estimates for TRIM-R is -.010 and TRIM-A-NK is .063 in Step 4. $R^2$ score increased from .387 to .369 in Step 3 (Table 21). In Step 4, another predictor variable of forgiveness was included in the analysis. The result suggests that the DFS-NK was found to be significantly associated with trauma. Parameter estimates for DFS-NK is -.178. and EFS-NK is -.002. In Step 5 another predictor variable of social adaptation was included in the analysis. The result suggests that social adaptation was not found to be significantly associated with trauma symptoms (Parameter estimates= -.077).

The hierarchical multiple regression analysis was computed on the predictor variable of religious commitment, Hurt Severity, Unforgiveness, forgiveness (using
adapted North Korean version of the DFS and EFS) and social adaptation with the
criterion variables of mood disorder (CES-D) (Table 22). Variables were entered by their
chronological order of occurrence.

In Step 1, religious commitment was not found to be significantly negatively
associated with mood disorder. In Step 2, another predictor variable of Hurt Severity was
included in the analysis. The result suggests that Hurt Severity was not found to be
significantly associated with depression (Parameter estimates= .002). In Step 3, RIO-NK,
TRIM-R and TRIM-A were accumulated to step 2, rumination was the most powerful
factor of unforgiveness for depression symptoms (Parameter estimates= .188). R² score
increased from .150- to .169 in Step 3. RIO-NK, TRIM-R and TRIM-A-NK and Hurt
Severity were not found to be significantly associated with depression symptoms. In Step
4, DFS-NK and EFS-NK were not found to be associated with mood disorder. Finally,
the predictor variable of social adaptation was included in the analysis in step 5. Social
adaptation was found to be significantly negatively associated with depression symptom
(Parameter estimates= -.454).

Across the models, RIO-NK was the most powerful factor of unforgiveness
compared to the other subscales of unforgiveness (see Table 21, 22).
Table 20

Summary of Correlation Variables and Mental health

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>TSNKR</td>
</tr>
<tr>
<td>RCI1 (Intra)</td>
<td>2.558</td>
<td>1.212</td>
<td>0.004</td>
</tr>
<tr>
<td>RCI2 (Inter)</td>
<td>2.636</td>
<td>1.259</td>
<td>-0.032</td>
</tr>
<tr>
<td>DFS-NK</td>
<td>2.581</td>
<td>0.954</td>
<td>-0.495</td>
</tr>
<tr>
<td>EFS-NK</td>
<td>2.523</td>
<td>0.847</td>
<td>-0.428</td>
</tr>
<tr>
<td>SASS</td>
<td>2.030</td>
<td>0.356</td>
<td>-0.063</td>
</tr>
<tr>
<td>Hurt Severity</td>
<td>4.082</td>
<td>1.133</td>
<td>0.308</td>
</tr>
<tr>
<td>Duration Hurt</td>
<td>9.700</td>
<td>11.353</td>
<td>-0.078</td>
</tr>
<tr>
<td>Pre-Closeness</td>
<td>3.455</td>
<td>1.255</td>
<td>0.091</td>
</tr>
<tr>
<td>Post-Closeness</td>
<td>1.940</td>
<td>0.934</td>
<td>-0.330</td>
</tr>
<tr>
<td>Types of HURT</td>
<td>3.320</td>
<td>1.122</td>
<td>0.343</td>
</tr>
<tr>
<td>RIO-NK</td>
<td>3.382</td>
<td>0.897</td>
<td>0.567</td>
</tr>
<tr>
<td>TRIM-R</td>
<td>3.945</td>
<td>0.936</td>
<td>0.404</td>
</tr>
<tr>
<td>TRIM-A-NK</td>
<td>3.715</td>
<td>1.066</td>
<td>0.407</td>
</tr>
<tr>
<td>TSNKR (Trauma)</td>
<td>2.249</td>
<td>0.675</td>
<td>0.627</td>
</tr>
<tr>
<td>CES_D (Depression)</td>
<td>2.065</td>
<td>0.422</td>
<td>***</td>
</tr>
</tbody>
</table>

*** p < .001
Table 21

Hierarchical multiple regression analysis: Predicting North Korean Trauma from Religious commitment, Hurt severity, Unforgiveness, Forgiveness and Social Adaptation.

<table>
<thead>
<tr>
<th>Step</th>
<th>Criterion variables</th>
<th>Predictor Variables</th>
<th>Parameter estimates</th>
<th>Tolerance</th>
<th>VIF</th>
<th>R² (Adj. R²)</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trauma (TSNKR)</td>
<td>Religious commitment</td>
<td>RC11 (Intra)</td>
<td>0.1453</td>
<td>0.1296</td>
<td>7.7187</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RC12 (Inter)</td>
<td>-0.1478</td>
<td>0.1296</td>
<td>7.7187</td>
<td>(0.0024)</td>
</tr>
<tr>
<td>2</td>
<td>Trauma (TSNKR)</td>
<td>Religious commitment</td>
<td>RC11 (Intra)</td>
<td>0.1237</td>
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</tr>
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<td></td>
<td>Hurt severity</td>
<td>RC12 (Inter)</td>
<td>-0.1343</td>
<td>0.1294</td>
<td>7.7254</td>
<td>(0.0931)</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Trauma (TSNKR)</td>
<td>Religious commitment</td>
<td>RC11 (Intra)</td>
<td>0.0960</td>
<td>0.1243</td>
<td>8.0441</td>
<td>0.3599</td>
</tr>
<tr>
<td></td>
<td>Hurt severity</td>
<td>RC12 (Inter)</td>
<td>-0.1124</td>
<td>0.1267</td>
<td></td>
<td>7.8920</td>
<td>(0.3452)</td>
</tr>
<tr>
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<td>Unforgiveness</td>
<td>RIO-NK</td>
<td>0.3283***</td>
<td>0.5774</td>
<td></td>
<td>1.7320</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>TRIM-R</td>
<td>0.0679</td>
<td>0.6104</td>
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<td>TRIM-A-NK</td>
<td>0.0940*</td>
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<td></td>
<td>1.4642</td>
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</tr>
<tr>
<td>4</td>
<td>Trauma (TSNKR)</td>
<td>Religious commitment</td>
<td>RC11 (Intra)</td>
<td>0.1142</td>
<td>0.1237</td>
<td>8.0820</td>
<td>0.3879</td>
</tr>
<tr>
<td></td>
<td>Hurt severity</td>
<td>RC12 (Inter)</td>
<td>-0.1213</td>
<td>0.1266</td>
<td></td>
<td>7.9020</td>
<td>(0.3690)</td>
</tr>
<tr>
<td></td>
<td>Unforgiveness</td>
<td>RIO-NK</td>
<td>0.3033***</td>
<td>0.5429</td>
<td></td>
<td>1.8421</td>
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</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>Forgiveness</td>
<td>DFS-NK</td>
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<td>EFS-NK</td>
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<td></td>
</tr>
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<td>5</td>
<td>Trauma (TSNKR)</td>
<td>Religious commitment</td>
<td>RC11 (Intra)</td>
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<td>0.1211</td>
<td>8.2555</td>
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<td></td>
<td>Hurt severity</td>
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<td>0.1260</td>
<td></td>
<td>7.9371</td>
<td>(0.3682)</td>
</tr>
<tr>
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<td>Unforgiveness</td>
<td>RIO-NK</td>
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<td>TRIM-R</td>
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<td>TRIM-A-NK</td>
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<tr>
<td></td>
<td>Forgiveness</td>
<td>DFS-NK</td>
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<td></td>
<td>EFS-NK</td>
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<tr>
<td></td>
<td>Social adaptation</td>
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<td></td>
<td>1.1143</td>
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</table>

Notes. * p < .05, ** p < .01, *** p < .001
Table 22.

**Hierarchical multiple regression analysis: Predicting North Korean Depression from Religious commitment, Hurt severity, Unforgiveness, Forgiveness and Social Adaptation.**

<table>
<thead>
<tr>
<th>Step</th>
<th>Criterion variables</th>
<th>Predictor Variables</th>
<th>Parameter estimates</th>
<th>Tolerance</th>
<th>VIF</th>
<th>$R^2$ (Adj. $R^2$)</th>
<th>$\Delta R^2$</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Depression (CES-D)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) 0.0030</td>
<td>0.1296</td>
<td>7.7187</td>
<td>0.0018</td>
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<td></td>
<td></td>
<td></td>
<td>RCI1 (Inter) -0.0167</td>
<td>0.1296</td>
<td>7.7187</td>
<td>(-0.0057)</td>
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<td>2</td>
<td>Depression (CES-D)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) 0.0057</td>
<td>0.1293</td>
<td>7.7347</td>
<td>0.0412</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hurt severity</td>
<td>RCI2 (Inter) -0.0113</td>
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<td>(0.0304)</td>
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<td></td>
<td></td>
<td>-0.0740**</td>
<td>0.9966</td>
<td>1.0034</td>
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</tr>
<tr>
<td>3</td>
<td>Depression (CES-D)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) 0.0356</td>
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<td>8.0441</td>
<td>0.1693</td>
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<td></td>
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<td>Hurt severity</td>
<td>RCI2 (Inter) 0.0097</td>
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<td>(0.1503)</td>
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<tr>
<td></td>
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<td>TRIM-R -0.0213</td>
<td>0.6104</td>
<td>1.6383</td>
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<td>-</td>
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<td></td>
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<td></td>
<td>TRIM-A-NK 0.0277</td>
<td>0.6830</td>
<td>1.4642</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Depression (CES-D)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) 0.0345</td>
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<td>8.0820</td>
<td>0.1706</td>
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<td></td>
<td></td>
<td>Hurt severity</td>
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<td>7.9020</td>
<td>(0.1451)</td>
<td>-</td>
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<td>0.7117</td>
<td>1.4050</td>
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<td>-</td>
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<tr>
<td></td>
<td></td>
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<td>TRIM-R 0.0061</td>
<td>0.4851</td>
<td>2.0616</td>
<td></td>
<td>-</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>TRIM-A-NK 0.0265</td>
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<td>1.5478</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Forgiveness</td>
<td>DFS-NK 0.0237</td>
<td>0.3250</td>
<td>3.0771</td>
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<td>-</td>
</tr>
<tr>
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<td>EFS-NK 0.0240</td>
<td>0.4183</td>
<td>2.3905</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Depression (CES-D)</td>
<td>Religious commitment</td>
<td>RCI1 (Intra) 0.0182</td>
<td>0.1211</td>
<td>8.2555</td>
<td>0.3027</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hurt severity</td>
<td>RCI2 (Inter) 0.0138</td>
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<td>(0.2785)</td>
<td>-</td>
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<td></td>
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<td></td>
<td>0.0150</td>
<td>0.6980</td>
<td>1.4328</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unforgiveness</td>
<td>RIO-NK 0.1473***</td>
<td>0.5261</td>
<td>1.9009</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRIM-R 0.0309</td>
<td>0.4849</td>
<td>2.0625</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>TRIM-A-NK 0.0355</td>
<td>0.6444</td>
<td>1.5517</td>
<td></td>
<td>-</td>
</tr>
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<td>Social adaptation</td>
<td>SASS 0.4541***</td>
<td>0.8974</td>
<td>1.1143</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

Notes. * p < .05, ** p < .01, *** p < .001
Summary

In the Confirmatory Factor Analysis, DFS-NK reached criterion levels after removing two items (items 5, 8) on the CFI, GFI and RMSEA. EFS-NK Items were acceptable with four items (item 14, 9, 12, 10) removed to reached criterion level. In the Multiple Regression Analysis, four of five predictors (social adaptation, hurt characteristics, forgiveness and unforgiveness) are suggested to indirectly or directly influence mental health for North Korean refugees. As hypothesized, factors of unforgiveness were found to be the most predictive factor of both trauma and depression symptoms. These results are more specifically discussed in the next chapter.
CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study had two intentions. First, through confirmatory factor analysis, it examined two forgiveness measures developed primarily in the U.S., the Decisional Forgiveness Inventory and the Emotional Forgiveness Inventory, with a new cultural group the North Korean refugee population. Second, it investigated the influence of social adaptation, religious commitment, unforgiveness characteristics, and forgiveness style on the self-reported mental health of North Korean refugees by Multiple Regression Analyses. This chapter will first briefly summarize the findings of the study. Next, in the conclusion section, the major findings related to the purpose of the study will be discussed. In the implications section, the relevance of the findings in the context of counseling will be discussed. And then the study’s limitations will be acknowledged, followed by suggestions for further research. Lastly, the chapter ends with a chapter summary.

Summary of the Findings

**Hypothesis 1-- Partially Supported.** The first hypothesis was that the psychometric data and the factor loadings of the Decisional Forgiveness Scale (DFS) and the Emotional Forgiveness Scale (EFS) items for the U.S. population would be suitable for the North Korean refugees. In the Confirmatory Factor Analysis on these forgiveness scales, DFS-NK was acceptable after removing two items. CFI, GFI and RMSEA scores reached criterion level after removing items 5 and 8. EFS-NK reached criterion level with four items (item 14, 9, 12, 10) removed for the North Korean refugee population. Thus, it is suggested that these forgiveness instruments, when modified with appropriate item deletions, could be considered as useful for North Korean refugees.
Hypothesis 2-- Partially Supported. The second hypothesis was that social adaptation, forgiveness and religious commitment are negatively associated with self-reported trauma and depressive mood symptoms for North Korean refugees. The hierarchical multiple regression analysis was computed on the predictor variable of religious commitment and the North Korean version of the DFS and EFS and social adaptation with the criterion variables of trauma and depression symptoms. Data analysis showed that forgiveness (DFS-NK) was the main factor for trauma, suggesting participants who are more likely to have decided to forgive are experiencing lower levels of trauma. Or, alternatively, that those who experience lower levels of trauma are more likely to decide to forgive. The nature of this study’s design prevented a directional causal determination. Social adaptation was the main factor for depressive mood symptom, suggesting participants who are more socially adapted are experiencing lower levels of depressive mood symptoms.

Hypothesis 3-- Partially Supported. The findings of this study also positively answered the third research question regarding the impact of religious commitment on social adjustment. It was hypothesized that religious commitment and forgiveness are positively associated with social adjustment. Consistent with the hypothesis, a significant positive relationship was found between a religious commitment (Intrapersonal RC, Interpersonal RC) and social adjustment (r=.22, .18 respectively). This indicates that the more religiously committed participants are likely to be more socially adjusted than those who are less religiously committed. Or, alternatively, more socially adjusted participants are more likely to be religiously committed than less socially adjusted participants.
However, no hypothesized relationship was found between forgiveness and social adjustment.

**Hypothesis 4-- Partially Supported.** It was hypothesized that unforgiveness and hurt characteristics would be significantly positively associated with trauma and depression while forgiveness would inversely predict trauma and depression symptoms. The correlation analysis showed that unforgiveness (RIO-NK, TRIM-R, TRIM-A-NK) and the severity of their experienced hurt (Hurt Severity) were significant factors for self-reported trauma and depression symptoms. This indicates that participants with higher scores on unforgiveness and the severity of their experienced hurt will have higher depression and trauma symptoms. However, as the current study tested Hypothesis 2 with the hierarchical multiple regression analysis, religious commitment was not found to be associated with trauma and depression symptoms.

**Hypothesis 5-- Supported.** It was hypothesized that out of the variables explored in this study (religious commitment, forgiveness, and hurt characteristics) unforgiveness variables would be the strongest predictor of PTSD and depression symptoms. Consistent with the hypothesis, the correlation analysis indicated that unforgiveness was the most predictive factor of trauma and depression symptoms compared to the other variables. As an indicator of unforgiveness, rumination (RIO-NK) about the experience of the North Korean government was found to be the most significant predictor of trauma and depression symptoms in the current study. The hierarchical multiple regression analysis was included in research question 5 to determine the differences among the effects of the subscales of unforgiveness (RIO-NK, TRIM-R, TRIM-A-NK) (see Table 21, 22). Across the models, rumination (RIO-NK) was the most powerful factor of unforgiveness for
mental health compared to the other subscales of unforgiveness.

Conclusions

In this section, the hypotheses and key findings are connected to the extant literature. First, the utility of the DFS-NK and EFS-NK instruments will be considered for the North Korean refugee population. Next, findings for the social adaptation variable’s influence on mental health will be considered in light of the literature. Religious commitment results will then be connected to the literature, and the findings for unforgiveness and forgiveness style will follow. Implications, limitations, and recommendations will conclude the dissertation.

Usefulness of the Instrument DFS and EFS. This is the first survey design study psychometrically evaluating western forgiveness instruments with the North Korean population. According to Hu and Bentler’s (1999) “two criteria” strategy, at least two other types of fit indices should be applied to the CFA in addition to the exact index. Therefore, GFI (exact index), CFI (incremental fit index) (Bentler, 1990) and RMSEA, (approximate fit index) (Steiger, 1980) were used to determine the model fit. Forgiveness instruments previously investigated with U.S populations were found to be useful with the North Korean refugee population with appropriate item deletions. In the current study, the CFA results for the North Korean refugee sample on DFS-NK showed that after removing items 5 and 8 from the original 8 items, the model resulted in a good fit. Chong’s (2009) study on evaluating this forgiveness instrument with South Korean population suggested that DFS was questionable since the RMSEA never met the criterion established. In the current study, EFS-NK items reached the criterion level of CFI, GFI and RMSEA after removing four items (9, 10, 12,14). Chong’s (2009) study on
evaluating the EFS with the South Korean population suggested that EFS appeared unacceptable because both the CFI and RMSEA criteria were not met. In sum, based on the psychometric properties and factor structure, it is suggested that this forgiveness instrument, when modified with appropriate item deletions, could be considered as a useful instrument for North Korean refugees. This is a very positive result given the suffering experienced by this population. Forgiveness may now be explored as a variable in research with North Korean refugees. Perhaps further refinement of the language of the measures, which are written in South Korean dialect, will produce similar results. Such refinement is recommended.

Social adaptation and mental health of North Korean refugees. The hierarchical multiple regression analysis and a simple linear regression suggested that social adaptation was found to be significantly negatively associated with depression symptoms, suggesting North Korean refugees who are more socially adapted are experiencing lower levels of mood disorder. Along with the results of the previous research, the current study also revealed that social adaptation was negatively associated with depressive mood disorder. Many research findings (e.g., Berry et al., 2002; Cho et al., 2005; Lee, 2003; Park, 2008; Porter & Haslam, 2005) support the correlation between social adaptation and depressive mood disorder. Cho and colleagues (2005) found that the adaptation process had a stronger association with depression than trauma did. Their findings indicated that adaptation stress exerted greater effect on depression than did trauma prior to defection. There is a significant gap between the South and North Koreans’ thoughts and behaviors as two generations have now passed since the division.
of the Korean peninsula. In the process of adaptation to South Korean culture, many refugees experience emotional instability (Lee & Song, 1997).

**Religious Commitment and Mental health of North Korean refugees.** With regard to the relationship between religious commitment and mental health, many previous studies’ results with American sample indicated that religiosity may be associated with mental health benefits (Hummer et al., 2004; Jarvis, Kirmayer, Weinfield, & Lasry, 2005; Koening, McCullough, & Larson, 2001). Chong (2009) also found that religious commitment and overall health were associated in the South Korean population. However, the current study and two prior studies with North Korean samples failed to show a relationship between religious commitment and mental health (Choi, 2005; Lee, 2004). Choi (2005) studied the relationship between religious commitment and depression among 149 North Korean defectors with the BDI (Beck Depression Inventory) and the Korean Religious scale. Choi failed to show a significant relationship between the Korean Religious scale and the BDI. The results of Lee’s study (2004) also indicated that religiosity was not significantly associated with depression symptoms. The failure to demonstrate this relationship in this study might be due to using a unique population sample of North Korean refugees. In the current study, the North Korean sample did show lower levels of religious commitment. Compared with previous studies with South Korean samples, the mean item values of the North Korean sample were lower than those of the South Korean samples in Chong’s study (2009) and Park’s study (2010). In the current study, the mean value of Interpersonal RC was 2.56 and Intrapersonal RC was 2.64. The Interpersonal RC for the South Korean sample was 3.89 and the Intrapersonal RC was 3.71 in Park’s study (2010).
One possible explanation for the lack of a significant relationship between religious commitment and mental health in this study is that North Korean defectors may not have enough time to establish their own personal and intimate relationship with God. Most North Korean defectors received various support from evangelists in foreign countries or in South Korea. They wanted to keep their loyalty toward those who helped them. Support is stated as one of the main reasons why they attend church (Cho, 2009). Kwak (2009) points out that many Christian organizations help North Korean refugees in the escape process and many North Korean refugees turned to Christianity not only as a true conversion but also for support from religious groups. Furthermore, loneliness is a major challenge for North Korean refugees in South Korea. Many North Korean refugees attend church because the church can be a place for them to form relationships with others (Kwak, 2009).

The results of hierarchical multiple regression analysis indicated that intrapersonal religious commitment and trauma symptom were positively associated. This result appears to be contradictory to literature (Pargament, 1997). One possible explanation of the result is that North Koreans’ conceptions about God may negatively affect their mental health. Many of the North Korean refugees may conceive God as a punishing entity rather than forgiving because North Koreans have been exposed to the education of Juche ideology. The children are continually taught by the principles of Juche ideology throughout their educational experience (Ha, 2008). Participation in organizations is mandatory, and from about the age of two, in the home, nursery, school, and society, North Koreans have been educated to detest Americans, South Koreans and Christianity as arch enemies (Im, 2001). Koenig et al. (2001) noted that intrapersonal
religious commitment can be a negative predictor for health if a conceptualization of God is mainly judging and punishing. Believing in a punishing God rather than a forgiving God may lead to a negative influence on mental health among North Korean defectors.

**Forgiveness and Mental health of North Korean refugees.** As hypothesized, the correlation analysis showed that forgiveness was significantly negatively associated with self-reported trauma and depressive mood disorder, suggesting that individuals who are more likely to forgive experience lower levels of trauma and depression symptoms. In previous studies, the majority of studies with U.S. samples found that forgiveness was related to mental health benefits (Al-Mabuk et al., 1995; Feldman, & Beckham, 2004; Festa & Tuck 2000; Freedman & Enright, 1996; Hall & Fincham, 2005; Harris et al., 2006; Harris & Thoresen, 2005; Lawler et al. 2005; Reed & Enright, 2006; Rye et al., 2005; Rye & Pargament, 2002; Witvliet, Phipps, McCullough & Worthington, 1995). However, prior to the current study, no research on forgiveness relating to mental health had been studied among North Korean refugees. The result that forgiveness was associated with mental health among the North Korean sample strengthens the views expressed by researchers who supported that the application of forgiveness among various cultural groups serves as a tool to remedy deeply rooted afflictions (Freedman & Chang 2010; Gamboro, 2002; Hook, Worthington, & Utsey, 2009; Freedman & Enright, 1996; Hansen, 2002; Nathan, 2009; Reed & Enright, 2006).

The current study shows that severity of hurt was also found to be associated with lower levels of forgiveness. In previous studies, offense severity is important to forgiveness; willingness to forgive decreased when severity of offense increased (Olson, 2005).
Unforgiveness and Mental health of North Korean refugees. As hypothesized by the researcher, unforgiveness was the most direct and consistent predictor of mental health compared to other variables. The findings are in line with the previous research findings that unforgiveness is correlated with trauma symptoms (Park, 2007; Horowitz, Wilner, Kaltreider, & Alvariz, 1980) and depression (Nolen-Hoeksema, 1987, 1991). Park’s (2007) study indicated that the North Korean refugees who had a high level of PTSD symptoms were found to have a higher frequency of unforgiveness (TRIM) than participants who had a lower level of PTSD.

Also, as an indicator of unforgiveness, rumination (RIO) about the experience of hurt was found to be the most significant predictor of mental health in this study. This result is consistent with previous studies of rumination and health (Barber, Maltby, & Macaskill, 2005; Chong, 2009; Worthington & Scherer, 2004).

Rumination is an intrapersonal behavioral reaction to hurt experience while revenge and avoidance are interpersonal reaction (Chong, 2009). In the current study, hierarchical multiple regression analysis shows that revenge and avoidance, the interpersonal behavioral reactions to hurt, were not found to be significantly impacting mental health for North Korean refugees. However, rumination of intrapersonal reaction was found to be the most significant predictor of mental health. Hook, Worthington, and Utsey (2009) propose a theoretical model that clarifies the relationship between collectivism and forgiveness. In a collectivistic society, the importance of maintaining social harmony is central to the relationship. Collectivistic forgiveness is understood primarily as a decision to forgive but is motivated largely by the desire to maintain group harmony rather than inner peace.
North Korea has an extremely collectivistic society (Kang, 2008; Ha, 1992) and a centralized government under the rigid control of the Korean Workers' Party (KWP). In this society, revenge is discouraged and avoidance might bring dangerous attention from surveillance police or security agents. Rumination appears to be the safest strategy to discourage an offensive behavior in such a situation. Thus, culturally, rumination as an expression of unforgiveness may be prominent.

Concerning the types of hurt (traumatic events) in the current study, the following are four events with the highest to the lowest frequency of extreme hurt; “eyewitness to a family member, relative, or close neighbor dying of starvation” (n=120), “inability to help a family member or relative who suffered or has died from a disease” (n=110), “eye witnessing to the punishment of an acquaintance for political misconduct” (n=105)” and “agony over family’s political background (e.g., parents who defected from South Korea)” (n=101)”. The results of the various types of hurt show that the trauma related to human relationships, such as trauma related to family members, plays an important role in PTSD symptoms. Previous studies reported that separation from family members caused PTSD symptoms (Caspi, Poole, Mollica, & Frankel, 1998). North Korea has a strong tradition emphasizing family relationships. The North Korean government punishes not only the person who commits a political crime but also his or her family members rather harshly. Since this method is used as means of controlling North Koreans, family bonds among North Koreans have strengthened, and as a result worry and concern about their family members have become more intense (Jeon, Hong, Lee, Kim, Han, & Min, 2005). This is a possible explanation why the more traumatic events (hurt experience) were related to family members.
Limitations

There were several limitations to this study. The selection of participants may add to the study limitations. Although the present study included participants from Buddhism, Christianity, Confucianism, and atheism, the majority of participants were Christian. This is attributable to the fact that Christianity is the largest religious group among North Korean defectors. However, much of the research on forgiveness has been conducted with primarily Christian samples. Also, the religious instruments were developed with religious populations, which will help mitigate this concern.

In addition, this study employed self-report questionnaires. Self-report response may be influenced by other factors than those intended by the survey instrument. It is not clear whether the participants answered the questionnaires in an honest manner or simply gave socially acceptable responses. However, the anonymous nature of the survey may help limit this concern.

Finally, the recruitment procedure and its sample size may have limited the representation of the entire refugee population from North Korea. Random sampling would have been the preferred methodology to permit better generalization of these results; however, access to any large database of North Korean refugees was not possible.

Implications

A practical outcome from this study was to provide some useful information for organizations for North Korean refugees, social services, churches, and the Unification Department of South Korea. The results of the current study suggest that when counseling a North Korean refugee, assessing for the presence of rumination about a hurt from the North Korean regime is a critical activity. North Korean refugees were
continually exposed to the high level of collectivism of Juche ideology throughout their educational experience (Ha, 2008). In such a situation, unforgiving behavior of avoidance and revenge go against the rigid control of centralized government. Thus, North Korean refugees may be predisposed to ruminate about a transgression even if an action of reconciliation was reportedly implemented with the North Korean regime.

Providing forgiveness intervention groups that address rumination for North Korean refugee clients may decrease their risk of rumination tendency. One of the significant advantages of a forgiveness intervention is that it acknowledges one’s own previous interpersonal offenses to minimize the fundamental attribution errors (i.e., the tendency to ignore situational factors).

**Recommendations**

More research is needed to examine how religious commitment and unforgiveness are related to mental health using a sample of North Korean who are living in China or another third-party country. In addition, qualitative research is recommended such as case study methods, which may minimize the need of a bigger sample size for North Korean refugees. A qualitative design may reveal more in-depth information that amplifies on the results of this quantitative study.

Results from the current study indicated the importance of forgiveness in the counseling of North Korean refugees and the necessity to consider integrating forgiveness into the healing process. Future research needs to examine the effectiveness of forgiveness interventions in this unique population. In addition, incorporating a religious framework into forgiveness intervention is recommended for the North Korean
refugee population because over 60% of North Korean refugees profess the Christian faith.

In order to provide effective mental health service in the adaptation process of Hanawon, treatments for trauma and depressive mood disorder symptoms can be adapted for North Korean refugees. Mental health professionals working with refugees should culturally adapt treatments which have been proven to be effective for reducing trauma symptoms in Western populations to refugee populations rather than simply generalizing from studies of individualistic populations (Schultz et al., 2006).

Psychologists have developed interventions targeting forgiveness as an effect (e.g., Enright & Fitzgibbons, 2000; Worthington, 2003). Meta-analyses have found that forgiveness interventions demonstrate moderate to large effect sizes in improving forgiveness and mood disorders (Baskin & Enright, 2004; Lundahl et al., 2008; Wade, Worthington & Meyer, 2005). Wade, Worthington and Meyer (2005) identified five common components of major forgiveness interventions: 1) defining forgiveness to clarify goals and build shared understanding; 2) remembering and verbalizing the hurt caused by the offense to encourage catharsis; 3) building empathy for the offender to humanize the other person; 4) acknowledging one's own previous interpersonal offenses to minimize the fundamental attribution error (i.e., the tendency to explain behaviors through the dispositional characteristics of an individual and ignore situational factors; and 5) committing to forgiveness and setting a goal to pursue or maintain forgiveness. Forgiveness can provide North Korean refugees with hope for a future grounded in reality (Tutu, 1998) and an alternative to hate and revenge (Schumm, 1995) where there was once an inability to project a future, resulting in the loss of hope.
When North Korean defectors hid themselves in China or wandered in many countries, the defectors were insecure and their future was uncertain. Some met Korean Christians in times of danger, and were protected and supported by them. Others contacted religious people during their initial period of confusion in the South. Many churches support defectors financially and provide material necessities. These activities affected their decision to follow Christianity. However, South Korean churches should nurture and educate them to establish the true perception of God. Believing in a punishing God rather than a forgiving God may lead to a negative influence on mental health among North Korean defectors.

As noted, rumination hinders forgiveness and the research consistently reports rumination is associated with a number of deleterious mental health effects (Barber, Maltby, & Macaskill, 2005; Chong, 2009; Worthington & Scherer, 2004). However, it is important to note, that clients may not be motivated to stop ruminating on their own. An approach known as Rumination-focused Cognitive Behavior Therapy (Watkins, 2009) targets rumination specifically in a number of ways. For example, clients are taught how to recognize warning signs for rumination, develop alternative strategies and contingency plans, and alter environmental and behavioral contingencies maintaining rumination (i.e., make them less automatic).

**Final Summary**

This study had two intentions. First, it examined two forgiveness measures, the Decisional Forgiveness Scale and the Emotional Forgiveness Scale with a new cultural group the North Korean refugee population through confirmatory factor analysis. This is the first survey design study psychometrically evaluating western forgiveness instruments.
with the North Korean population. Chong’s (2009) study on evaluating the DFS and EFS was questionable with the South Korean population. This study found that these forgiveness instruments, when modified with appropriate item deletions, could be considered as useful for North Korean refugees. This is a very positive result given the suffering experienced by this population. Forgiveness may now be explored as a variable in research with North Korean refugees. Perhaps further refinement of the language of the measures, which are written in South Korean dialect, will produce similar results. Such refinement is recommended.

Second, the current study investigated the influence of social adaptation, religious commitment, unforgiveness characteristics, and forgiveness style on the self-reported mental health of North Korean refugees. In the Multiple Regression Analysis, four of five predictors (social adaptation, hurt characteristics, forgiveness and unforgiveness) were suggested to indirectly or directly influence mental health for North Korean refugees.

The result suggested that forgiveness was significantly negatively associated with self-reported trauma and depressive mood disorder. In previous studies, the majority of studies with U.S. samples have found that forgiveness was related to mental health benefits (Al-Mabuk et al., 1995; Feldman, & Beckham, 2004; Festa & Tuck 2000; Freedman & Enright, 1996; Hall & Fincham, 2005; Harris et al., 2006; Harris & Thoresen, 2005; Lawler et al. 2005; Reed & Enright, 2006; Rye et al., 2005; Rye & Pargament, 2002; Witvliet, Phipps, McCullough & Worthington, 1995). However, prior to the current study, no research on forgiveness relating to mental health had been conducted among North Korean refugees. The result that forgiveness was associated with mental health among the North Korean sample strengthens the views expressed by
researchers who supported that the application of forgiveness among various cultural
groups serves as a tool to remedy deeply rooted afflictions (Freedman & Chang 2010;  
Gamboro, 2002; Hook, Worthington, & Utsey, 2009; Freedman & Enright, 1996; Hansen,  
2002; Nathan, 2009; Reed & Enright, 2006). In addition, incorporating a religious  
framework into forgiveness interventions is recommended for the North Korean refugee  
population because over 60% of North Korean refugees profess the Christian faith.  
In the current study, unforgiveness was found as the most predictive factor of  
trauma and depression symptoms compared to the other variables. This result is  
consistent with previous studies of rumination and health (Barber, Maltby, &  
Macaskill, 2005; Chong, 2009; Worthington & Scherer, 2004). As an indicator of  
unforgiveness, rumination (RIO-NK) about the experience of hurt was found to be the  
most significant predictor of trauma and depression symptom in this study. North Korea  
has an extremely collectivistic society (Kang, 2008; Ha, 1992) and a centralized  
government. Thus, culturally, rumination as an expression of unforgiveness may be  
prominent. This finding suggests that when counseling a North Korean refugee, assessing  
for the presence of rumination and directly treating such rumination when present is a  
critical activity.  
More research is needed to examine how religious commitment and unforgiveness  
are related to mental health using a sample of North Koreans who are living in China or  
another third-party country. The results from the current study recommend to consider  
integrating forgiveness into the healing process and future research needs to examine the  
effectiveness of forgiveness interventions in this population.
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Dear __________.

Thank you for participating in this research. As a doctoral candidate of the Center for Counseling and Family Studies of Liberty University, I am currently conducting a study on the relationship between spirituality and mental health with Dr. Fernando Garzon as my advisor, and need your help.

In an effort to find out if religious or spiritual characteristics influence mental health, Dr. Garzon and I are administering a survey to adult North Korean defectors. Your input can help us to have important knowledge about mental health status in relation to adaptation and spiritual values. With this knowledge, we expect to create programs to assist North Korean refugees who are living in South Korea and U.S.A. We estimate that it will take participants approximately 30-40 minutes to complete the survey.

Answers to these questions will be kept confidential (used only for the purposes of research for this project) and private questions and information, such as participants’ names, addresses, or phone numbers are not included in the survey. If your organization would be willing to participate in this survey, or if you have any questions regarding this study, please email Jin Uk Park at jinukpark@liberty.edu or call us at 571-239-5959 (U.S.), (703) 670-0098 (U.S.) or email fgarzon@liberty.edu (Dr. Garzon)

Sincerely yours,

Jin Uk Park

Center for Counseling and Family Studies of Liberty University

15304 Lord Culpeper Ct. Woodbridge, VA 22191, USA
Appendix B: Consent Form

A study of social injustice and forgiveness in the case of North Korean refugees

Jin Uk Park
Liberty University
Center for Counseling and Family Studies

You are invited to be in a research study exploring the relationship among social adaptation, religious commitment, unforgiveness, forgiveness style and self-reported mental health among the North Korean refugees. Your assistance and participation are greatly appreciated by the researcher. We ask that you read this form and ask any questions you may have before agreeing to be in the study. This study is being conducted by: Jin Uk Park, Doctoral Candidate, Counseling Department of the Center for Counseling and Family Studies.

Background Information

Previous research has been limited in understanding the importance of religious and spiritual needs for North Korean refugees. The effect of religiosity on mental health is another factor that has not been explored in previous studies for North Korean refugees. Understanding the process of social adaptation and the potential impeding influence of unforgiveness may be critical for helping North Korean refugees move toward true forgiveness. Thus, results of this study may be an important initial step to help the refugees in transforming the pain from their past and releasing incapacitating emotions, and unresolved anger.

Procedures

If you agree to be in this study, we would ask you to do the following things:

You will complete a demographic form and ten assessments to include the Social Adaptation Self-rating Scale (SASS), Religious Commitment Inventory (RCI), Trauma Scale for North Korean Refugee (TSNKR), Center for Epidemiologic Studies (CES-D),
the Most Painful Hurt experience, The Decisional and Emotional Forgiveness Scale (DFS/EFS), The Rumination About an Interpersonal Offense Scale (RIO), the Transgression-Related Interpersonal Motivations Scale (TRIM), and Types of Hurts. Completion of the assessments should take about 30-40 minutes.

**Risks and Benefits of being in the Study**

There are potential risks and benefits to you for being part of this study. Some of the items in the questionnaire may remind you of some memories of your own experience of hurts or trauma in the past. Some items may evoke uncomfortable emotions such as grief over the loss of family members or friends. If you experience such intense feelings and if you don’t want to finish all the materials, you are free to withdraw from this study anytime. If you feel uncomfortable during and after this study, you are encouraged to seek counseling at Talbukjajiwon-center (Support Center for North Korean Defectors) 1577-6635 in Korea or the Korean American Counseling Center, 703-761-2225 in U.S. The study has several benefits to the participants. One of the benefits of answering the assessments is that they may provide hope for true forgiveness as an alternative to hate and revenge. Thus, results of this study may be an important initial step to help the refugees in the pain from their past and releasing incapacitating emotions and unresolved anger.

**Compensation**

For participating in this study you will receive 10,000 won. Compensation will be given to all participants who complete the survey.

**Confidentiality**

Your participation is anonymous and secure. The tests and questionnaires will be identified by only the code number in order to protect your privacy and confidentiality. Also, this anonymous data will be stored in a computer file that can be accessed only through a password. Records of the survey will be securely and privately maintained and
stored during and after the course of the research. The records of this study will be kept private and maintained in a locked box within a locked filing cabinet.

**Contacts and Questions**

The researcher conducting this study is Jin Uk Park. You may ask any questions you have and are encouraged to contact him. To reach him by telephone or e-mail: (571) 239-5959, jinukpark@liberty.edu. *(Dissertation Chair: Dr. Fernando Garzon, (434) 592-4045, fgarzon@liberty.edu. If you have any counseling concerns, you are encouraged to contact the Talbukjajiwon-center (Support Center for North Korean Defectors) 1577-6635 in Korea or Korean American Counseling Center, 703-761-2225 in U.S., 1952 Gallows Rd #340 Vienna, VA 22182.*

*Two copies of this form are provided for you, Please keep one copy of this information for your records. For the other copy, please check the box indicating your statement of consent and return it to the researcher or facilitator.*

**Statement of Consent:**

[ ] **By checking in the box on the left,** I agree to anonymous participation in this study, and to honestly respond to the questionnaires for accurate research.

Date: ____________________________

*Do not write your name or personal information.*

IRB Code #
IRB Expiration Date:
Appendix C: The Demographic Questions

1. What is your gender?
   - □ Male       □ Female

2. What is your age?

3. What is your current occupation?
   - 1) student   2) house wife   3) company employee   4) small business
   - 5) government worker 6) sales or services related job
   - 7) blue collar worker or daytime worker   8) professional job
   - 9) out of Job   10) Other

4. What is your marital status?
   - 1) married in North Korea and defected with spouse
   - 2) married in North Korea and defected alone
   - 3) married in South Korea   4) divorced in South Korea
   - 5) remarried in South Korea(America)
   - 6) Single (Never married)
   - 7) Widowed
   - 8) Other

5. What is your religion?
   - 1) Protestant Christianity 2) Catholicism
   - 3) Buddhism       4) Confucianism   5) Other   6) No religion

6. What is your household income monthly?
   - 1) Less than US $500/ 500,000 won
   - 2) US $500~1000/ 500,000 won ~ 1,000,000 won
3) US$1000~2000/ 1,000,000 won~2,000,000
4) US$2000~3000/ 2,000,000 won~3,000,000
5) US$3000~4000/ 3,000,000 won~4,000,000
6) US$4000 and more/ 4,000,000 won and more

7. What is your educational attainment?
   1) Under elementary school  2) Elementary school  3) Middle School
   4) High School  5) Early College-up to 2 years  6) Undergraduate-up to 4 years
   7) Graduate or up to doctoral level

8. How long did you lived in North Korea before entering South Korea?
   ____________years and ________months

9. How long did live in other country before entering South Korea/ America?
   ____________years and ________months

10. What is your reason(s) to escape from North Korea? Check all that apply
    □ Hunger and food shortages
    □ Political system of North Korea or communist ideology of North Korea
    □ Political persecution or discrimination due to poor family background in North Korean
    □ Worry about punishment of Political misconduct
    □ Desire to reunite with family in South Korea
    □ Desire to have economic opportunity
    □ Others……………….. Please write other reason(s) to escape

11. Do you have missing family member (Children, father, mother, spouse) in North Korea?
    □ Yes  □ No
Appendix D: The Demographic Questions (Korean)

본 설문은 무기명으로 실시되어 당신에게 어떠한 불이익도 초래하지 않을 것입니다. 조사한 내용은 통계 숫자로만 처리되어 개인의 비밀이 완전히 보장되고 학문적 목적에만 사용될 것임을 약속 드립니다.

다음은 당신에 대한 일반적인 질문입니다. 질문을 읽고 맞은 항목에 √ 하시거나 “해당사항”을 적어주십시오.

1. 당신의 성별은 무엇입니까? 남자 □ 여자 □
2. 당신 나이는 몇살입니까? 만 세
3. 당신의 현재 직업은 무엇입니까?
   1) 학생 2) 주부 3) 회사원 4) 자영업 5) 공무원
   6) 판매직 및 서버서비스직 7) 생산직 및 일일노동자 8) 전문직 9) 무직 10) 기타..............
4. 당신의 결혼 여부는?
   1) 북한에서 결혼 후 함께 이주 2) 북한에서 결혼 후 단독 이주
   3) 남한에서 초혼 결혼 4) 남한에서 이혼 후 현재 독신
   5) 남한(미국)에서 이혼 후 재혼 6) 미혼
   7) 과부 (남편이 죽고 혼자 삶) 기타................... 8) 혼아비 (아내가 죽고 혼자 삶)
   9) 기타........
5. 당신의 종교는 무엇입니까?
   1) 기독교 (개신교) 2) 가톨릭 3) 불교 4) 유교 5) 기타..................... 6) 무교
6. 당신 가족의 월 평균 수입은 어느정도입니까?
   1) 50만원 미만 (less than US $ 500)
   2) 50만원 ~ 100만원 (US $500~1000)
   3) 100만원~ 200만원 (US$1000~2000)
   4) 200만원 ~ 300만원 (US$2000~3000)
   5) 300만원~ 400만원 (US$3000~4000)
   6) 400만원 이상 (more $4000)
7. 당신의 학력은?
   1) 무학  2) 초등 (국민학교) 졸업  3) 중졸
   4) 고졸  5) 대졸  6) 대학원 이상

8. 북한에서 생활한 기간은?
   ........년 ..............개월 (남한)
   (만약 미국에서 생활했다면 미국에서 생활한 기간은)..............년 ..............개월 (미국)

9. 당신의 한국오기 전에 제 3국에서 체류한 기간은?

10. 탈북을 결심하게 된 이유는 무엇입니까? (해당사항을 모두 체크해 주십시오)
    □ 식량부족과 배고픔  □ 북한의 정치와 사상이 싫어서
    □ 가족의 출신성분 때문에 받는 차별과 정치적핍박이 싫어서
    □ 정치적 과오를 범해 처벌받을까 걱정이 되서
    □ 남한에 있는 가족들과 같이 살기 위해
    □ 경제적으로 너 잘 살기 위해서
    □ 기타... 탈북이유를 적어주세요..............................................................

11. 당신은 북에 두고온 가족 (자녀, 배우자, 부모) 이 있습니까? 있다면 누구입니까?
    □ 예  □ 아니오 ( ____________________ )
Appendix E: Social Adaptation Self-evaluation Scale (SASS)

You are asked to answer some simple questions, stating what your opinion is at this moment. Please answer all questions and circle one answer for each question. Thank you.

Do you have an occupation?  Yes ☐  No ☐

If yes

1. How interested are you in your occupation?

0------------------------1------------------------2------------------------3
Not at all      a little      very      Moderately

If no

2. How interested are you in home-related activities?

0------------------------1------------------------2------------------------3
Not at all      a little      Moderately      very

3. Do you pursue this occupation, these activities with:

0------------------------1------------------------2------------------------3
0. enjoyment at all only a little enjoyment?
1. only a little ?
2. Some enjoyment?
3. A lot of enjoyment?

4. Are you interested in hobbies/leisure?

0------------------------1------------------------2------------------------3
Not at all      a little      Moderately      very
5. How satisfied are you with the quality of your spare time?
   0----------------------1----------------------2----------------------3
   Unsatisfactory            Fair            Good            Very good

6. How frequently do you seek contacts with your family members (spouse, children, parents, etc.)?
   0----------------------1----------------------2----------------------3
   Never        rarely        frequently        very frequently

7. Is this state of relations in your family:
   0----------------------1----------------------2----------------------3
   Unsatisfactory?  Fair?  Good?  Very good?

8. Outside of your family, do you have relationships with:
   0----------------------1----------------------2----------------------3
   Nobody?  Only a few people?  Some people?  Many people?

9. Do you try to form relationships with others:
   0----------------------1----------------------2----------------------3
   In no active way?  Moderately activity?  Actively?  Very actively?

10. How-in general-do you rate your relationships with other people?
    0----------------------1----------------------2----------------------3
    Unsatisfactory    fair    good    very good

11. What value to you attach to your relationships with others?
    0----------------------1----------------------2----------------------3
    No value at all only a little value some value great value
12. How often do people in your social circle seek contact with you?

0-------------------1-------------------2-------------------3
Never     rarely     often     very often

13. Do you observe social rules, good manners, politeness, etc?

0-------------------1-------------------2-------------------3
Never     rarely     most of the time     always

14. To what extent are you involved in community life (such as club, church, etc.)?

0-------------------1-------------------2-------------------3
Not at all     slightly     moderately     fully

15. Do you like searching for information about things, situations and people to improve your understanding of them?

0-------------------1-------------------2-------------------3
Not at all     not much     moderately     very much

16. Are you interested in scientific, technical or cultural information?

0-------------------1-------------------2-------------------3
Not at all     not much     moderately     very

17. How often do you find it difficult to express your opinions to people?

0-------------------1-------------------2-------------------3
Always     often     sometimes     never

18. How often do you feel rejected, excluded from your social circle?

0-------------------1-------------------2-------------------3
Always     often     sometimes     never

19. How important do you consider your physical appearance?

0-------------------1-------------------2-------------------3
Not at all     not very much     moderately     very
20. To what extent do you have difficulties in managing your resources and income?

0----------------------1----------------------2----------------------3
Always                often                sometimes             never

21. Do you feel able to organize your environment according to your wishes and needs?

0----------------------1----------------------2----------------------3
Not at all            not very             moderately            very much so
Appendix F: Social Adaptation Self-evaluation Scale (SASS) (Korean)

사회적응자각평가질문지

1. 당신은 직업이 있습니까?

☐ 예 ☐ 아니오

2-1 (1 번 문항 직업이 있음에 체크한 경우만) 당신은 귀의 직업에 대해 얼마나 흥미가 있습니까?

0 1 2 3
전혀없다 없는편이다 많은편이다 매우 많다

2-2 (1 번 문항에 직업이 없음 ‘아니오’에 체크한 경우만) 당신은 가사활동에 대해 얼마나 흥미가 있습니까?

0 1 2 3
전혀없다 없는편이다 많은편이다 매우 많다

3. 당신은 직장이나 가사활동에서 얼마나 즐거움을 느끼십니까?

0 1 2 3
전혀즐겁지 않다 즐겁지 않다 즐겁다 매우즐겁다

4. 당신은 취미생활이나 레저 활동에 관심이 있습니까?

0 1 2 3
전혀없다 없는편이다 많은편이다 매우 많다

5. 당신은 당신의 여가활동에 대해 어떻게 생각합니까?

0 1 2 3
전혀만족스럽지 않다 만족스럽지 않다 만족스럽다 매우만족스럽다
6. 당신은 얼마나 많은 시간을 가족들과 함께 보내십니까?

   0 ---------------------------1---------------------------2---------------------------3
전혀보내지 않는다   보내지 않는다   보낸다   매우많이 보낸다

7. 가족들과의 관계는 어떻게습니까?

   0 ---------------------------1---------------------------2---------------------------3
전혀만족스럽지 않다   만족스럽지 않다   만족스럽다   매우만족스럽다

8. 당신은 가족 이외에 친밀하게 지내는 사람들이 몇 명정도 있습니까?

   0 ---------------------------1---------------------------2---------------------------3
ア무도 없다   극소수 (1-2 명)   조금있다 (3-5 명)   많은편 (6명이상)

9. 당신은 얼마나 적극적으로 다른 사람들과 사귀려고 노력합니까?

   0 ---------------------------1---------------------------2---------------------------3
전혀노력하지 않는다   노력하지않는다   노력한다   매우 노력한다.

10. 다른 사람들의 관계는 대체적으로 어떠하십니까?

   0 ---------------------------1---------------------------2---------------------------3
전혀 만족스럽지 않다   만족스럽지 않다   만족스럽다   매우만족스럽다

11. 당신은 다른 사람들과 사귀는 것이 얼마나 가치있다고 생각하십니까?

   0 ---------------------------1---------------------------2---------------------------3
전혀가치가 없다   가치가 없다   가치있다   매우가치있다

12. 당신 주변에 사람들이 당신과 사귀기 위하여 당신에게 얼마나 자주 접근을 합니다か?

   0 ---------------------------1---------------------------2---------------------------3
전혀접근하지 않는다   접근하지 않는다   접근한다   매우주주 접근한다
13. 당신은 남한의 사회규범, 좋은 태도, 예절을 지키는 것등과 같은 남한 사회에 잘 적응하고 계십니까?

0 1 2 3
전혀 그렇지 않다   그렇지 않다   그렇다   매우 그렇다

14. 당신은 지역사회 (교회, 친목회, 기타모임)에 어느 정도 참여 하십니까?

0 1 2 3
전혀 안한다   안하는 편이다   하는편이다   매우 많이 한다

15. 당신은 남한에서 어떤 일이나 상황 혹은 사람들들을 보다 잘 알기 위해 그와 관련된 정보를 찾습니까?

0 1 2 3
전혀 찾지 않는다   찾지 않는다   찾는다   매우 많이 찾는다

16. 당신은 남한의 과학이나 기술, 혹은 문화적인 정보들에 관심이 있습니까?

0 1 2 3
전혀그렇지 않다   그렇지 않다   그렇다   매우 그렇다

17. 당신의 자신의 의견을 다른 사람들에게 말할 때 얼마나 자주 어려움을 느끼십니까?

0 1 2 3
항상 느낀다. 자주 느낀다. 가끔 느낀다. 전혀 느끼지 않는다.

18. 당신은 당신이 속한 사회모임에서 얼마나 자주 소외된다고 느끼십니까?

0 1 2 3
항상 느낀다. 자주 느낀다. 가끔 느낀다. 전혀 느끼지 않는다.
19. 당신은 사회생활에서 외모가 얼마나 중요하다고 생각하십니까?

0 -----------------------------------------------------1------------------------------------ 2 ---------------------------------- 3
전혀 중요하지 않다                      중요하지 않다                      중요하다                          매우 중요하다

20. 당신은 당신의 수입과 재산을 관리하는데 어느 정도로 어려움을 느끼십니까?

0 -----------------------------------------------------1------------------------------------ 2 ---------------------------------- 3
항상 느낀다.                             자주 느낀다.                        가끔 느낀다                          전혀 느끼지 않는다.

21. 당신은 당신의 원하는 바램과 필요에 따라 주위의 환경을 바꿀 수 있다고 느끼고 있습니까?

0 -----------------------------------------------------1------------------------------------ 2 ---------------------------------- 3
전혀 그렇지 않다                          그렇게 않다                          그렇게                          매우 그렇다
Appendix G: The Religious Commitment Inventory

Please read the following statements and place a checkmark on the number that best describes you with each item.

1 = not at all true of me, 2 = somewhat true of me, 3 = moderately true of me, 4 = mostly true of me, 5 = totally true of me

1. I often read books and magazines about my faith.
   1--------------------------2--------------------------3--------------------------4--------------------------5

2. I make financial contributions to my religious organization.
   1--------------------------2--------------------------3--------------------------4--------------------------5

3. I spend time trying to grow in understanding of my faith.
   1--------------------------2--------------------------3--------------------------4--------------------------5

4. Religion is especially important to me because it answers many questions about the meaning of life.
   1--------------------------2--------------------------3--------------------------4--------------------------5

5. My religious beliefs lie behind my whole approach to life.
   1--------------------------2--------------------------3--------------------------4--------------------------5

6. I enjoy spending time with others of my religious affiliation.
   1--------------------------2--------------------------3--------------------------4--------------------------5

7. Religious beliefs influence all my dealings in life.
   1--------------------------2--------------------------3--------------------------4--------------------------5
8. It is important to me to spend periods of time in private religious thought and reflection.

1-----------------2------------------3------------------4-----------------5

9. I enjoy working in the activities of my religious organization.

1-----------------2------------------3------------------4-----------------5

10. I keep well informed about my local religious group and have some influence in its decisions.

1-----------------2------------------3------------------4-----------------5
Appendix H: The Religious Commitment Inventory (for North Korean Refugees)

다음의 각 사항들에 대해 얼마나 동의하시는지 해당되는 것에 표시해 주십시오.

1 = 전혀 그렇지 않다, 2 = 조금 그렇다, 3 = 중간 정도 그렇다, 4 = 대부분 그렇다, 5 = 매우 그렇다

1. 나는 종종 내 믿음 생활을 위해 종종 신앙서적이나 잡지 등을 읽는다.

```
1-------------------2-------------------3-------------------4-------------------5
```

2. 나는 내가 다니는 종교의 단체에 재정적으로 헌금을 한다.

```
1-------------------2-------------------3-------------------4-------------------5
```

3. 나는 내 신앙이 자라기 위해 시간을 내서 투자한다.

```
1-------------------2-------------------3-------------------4-------------------5
```

4. 신앙은 인생의 의미에 대한 질문들에 답을 알게 해주기 때문에 나에게 특별히 중요하다.

```
1-------------------2-------------------3-------------------4-------------------5
```

5. 나의 종교적 믿음들은 인생을 이해하는 내 전체 가치관의 바탕이 된다.

```
1-------------------2-------------------3-------------------4-------------------5
```

6. 나는 같은 종교를 믿는 사람들과 함께 교제하는 시간이 즐겁다.

```
1-------------------2-------------------3-------------------4-------------------5
```

7. 나의 종교적 믿음은 인생의 모든 문제를 다루는 방식에 영향을 준다.

```
1-------------------2-------------------3-------------------4-------------------5
```
8. 나는 종교적인 사색과 목상을 위해 시간을 정해놓고 나만의 시간을 갖는 것을 중요하게 여긴다.

9. 나는 내가 속한 종교단체의 모임에 참여하는 것이 즐겁다.

10. 나는 내가 속한 모임 (교회, 절, 성당 등) 이 어떻게 돌아가는지 잘 알고 있고, 어떤 결정을 내릴 때 참여하는 편이다.
Appendix I: Trauma Scale for North Korean Refugee (TSNKR)

<table>
<thead>
<tr>
<th>Question</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 recurrent and intrusive distressing recollections of the event,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 acting or feeling as if the traumatic event were recurring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 recurrent distressing dreams of the events.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 experience intense psychological distress on exposure to internal or</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>external cues that symbolize or resemble an aspect of the traumatic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>event.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 have restricted range of affect, (e.g. unable to have loving feelings)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 have an exaggerated startle response (very jumpy)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 have difficulty concentrating.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 have difficulty falling or staying asleep.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 are hypervigilant (may seem overly cautious)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 have irritability or outbursts of anger.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 make efforts to avoid activities, places, or people that arouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>recollections of the trauma.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 inability to recall an important aspect of traumatic events.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>13 have a diminished interest or participation in significant activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(such as important religious ceremonies, cultural or family events.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 sense of a foreshortened future (e.g. constantly worried about death</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>feel they don’t have much time left, does not expect to have kids,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>marriage, etc.?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 efforts to avoid thoughts, feelings, or conversations associated with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the trauma.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 have a physiological reaction when exposed to internal or external</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cues of traumatic events.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
다음에 제시된 문항들은 고통스러운 사건을 경험한 후에 사람들이 종종 나타날 수 있는 증상들입니다. 문항들 주의 깊게 읽고 지난 몇 주 동안 증상 때문에 얼마나 괴로웠는지 숫자 위에 표시해 주시요.

<table>
<thead>
<tr>
<th>문항</th>
<th>질문</th>
<th>전혀 없었다-0</th>
<th>거의 없었다-1</th>
<th>조금 있었다-2</th>
<th>매우 싫웠다-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>고통스러웠던 과거의 사건이 반복적으로 정차하게 따오르는 것을 경험하였다.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>마치 과거의 사건이 다시 일어나는 듯한 느낌을 경험하였다.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>과거의 사건에 대해서 반복적이고 괴로운 과정에 시달렸다.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>고통스러웠던 과거의 사건이 기억날 때 극심한 심리적 고통을 느꼈다.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>어떤 일이에 대해 감정을 느끼는 정도가 매우 줄어들었다</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>쉽게 놀라게 되었다.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>어떤 일이에 집중하기가 어려웠다.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>잠에 들거나 잠을 계속 자는 것이 어려웠다.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>누군가로부터 감시받는 듯한 느낌이 들었다.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>어떤 자극에 대해 민감해졌거나 분노가 폭발하였다.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>고통스러웠던 과거의 사건을 기억나게 하는 행동이나 장소, 사람들을 들어 일부러 회피하였다.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>과거 사건의 가장 고통스러웠던 부분을 기억할 수 없었다.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>중요한 활동에 대한 흥미나 참여가 매우 줄어들었다.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>나에게 미래가 없는 듯한 느낌이 들었다.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>고통스러웠던 과거의 사건과 관련있는 생각이 나 느끼, 대화 등을 일부러 회피하였다.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>고통스러웠던 과거의 사건이 기억날 때 진땀이 나거나 극심한 공포와 무력감 등을 느꼈다.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Appendix K: Depression Symptom Scale for North Korean defectors (CES-D)

Following is a list of ways you might have felt or behaved in the past few weeks. Please circle the appropriate number to indicate how often you have felt this way during the past few weeks. (Circle one number for each statement.)

<table>
<thead>
<tr>
<th>Rarely or none of the time</th>
<th>Some or a little of the time</th>
<th>Occasionally or moderate amount of time</th>
<th>Most Or All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. I was bothered by things that usually don't bother me.
   1-------------------2-------------------3-------------------4

2. I did not feel like eating; my appetite was poor
   1-------------------2-------------------3-------------------4

3. I felt that I could not shake off the blues even with help from my family or friends.
   1-------------------2-------------------3-------------------4

4. I felt that I was just as good as other people
   1-------------------2-------------------3-------------------4

5. I had trouble keeping my mind on what I was doing
   1-------------------2-------------------3-------------------4

6. I felt depressed
   1-------------------2-------------------3-------------------4

7. I felt that everything I did was an effort
   1-------------------2-------------------3-------------------4

8. I felt hopeful about the future
   1-------------------2-------------------3-------------------4
9. I thought my life had been a failure
   1----------------2----------------3----------------4

10. I felt fearful
    1----------------2----------------3----------------4

11. My sleep was restless
    1----------------2----------------3----------------4

12. I was happy
    1----------------2----------------3----------------4

13. I talked less than usual
    1----------------2----------------3----------------4

14. I felt lonely
    1----------------2----------------3----------------4

15. I enjoyed life
    1----------------2----------------3----------------4

16. I felt sad
    1----------------2----------------3----------------4

17. I had crying spells
    1----------------2----------------3----------------4

18. felt that people disliked me
    1----------------2----------------3----------------4

19. I could not get "going"
    1----------------2----------------3----------------4

20. People were unfriendly
    1----------------2----------------3----------------4
우울에 관한 질문지

아래 항목을 잘 읽고 지난 몇 주 동안 다음과 같은 일들을 얼마나 자주 겪었는지 표시해 주십시오.

<table>
<thead>
<tr>
<th>설명</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>전혀 없었다</td>
<td>한두번 있었다</td>
<td>많이 있었다</td>
<td>매일 있었다</td>
<td></td>
</tr>
</tbody>
</table>

1. 평상시에는 아무렇지도 않던 일들을 가지고도 귀찮게 느껴진다.

1조 ~ 4조

전혀 없었다 한두번 있었다 많이 있었다 매일 있었다

2. 입맛이 없었다.

1조 ~ 4조

전혀 없었다 한두번 있었다 많이 있었다 매일 있었다

3. 가족이나 친구들을 만나보고 애기도 했지만 계속 기분이 좋지 않았다.

1조 ~ 4조

전혀 없었다 한두번 있었다 많이 있었다 매일 있었다

4. 나는 다른 사람들과 마찬가지로 착한 편이라고 생각한다.

1조 ~ 4조

전혀 없었다 한두번 있었다 많이 있었다 매일 있었다

5. 내가 하는 일에 마음을 집중할 수가 없다.

1조 ~ 4조

전혀 없었다 한두번 있었다 많이 있었다 매일 있었다

6. 기분이 우울했다

1조 ~ 4조

전혀 없었다 한두번 있었다 많이 있었다 매일 있었다
7. 내가 하고자 하는 일 모두가 어렵다고 느꼈다
전혀 없었다   한두번 있었다   많이 있었다   매일 있었다

8. 나는 미래에 대하여 희망적으로 느꼈다
전혀 없었다   한두번 있었다   많이 있었다   매일 있었다

9. 내 인생은 실패였다고 생각한다.
전혀 없었다   한두번 있었다   많이 있었다   매일 있었다

10. 두려움을 느꼈다.
전혀 없었다   한두번 있었다   많이 있었다   매일 있었다

11. 잠을 시원하게 못썼다.
전혀 없었다   한두번 있었다   많이 있었다   매일 있었다

12. 행복한 편이었다
전혀 없었다   한두번 있었다   많이 있었다   매일 있었다

13. 평상시보다 대화를 적게 하였다
전혀 없었다   한두번 있었다   많이 있었다   매일 있었다

14. 외로움을 느꼈다.
전혀 없었다   한두번 있었다   많이 있었다   매일 있었다
15. 사람들이 대정하게 못하다고 느꼈다.
전혀 없었다 한 두번 있었다 많이 있었다 매일 있었다

16. 생활을 즐겁게 느꼈다.
전혀 없었다 한 두번 있었다 많이 있었다 매일 있다

17. 울었던 적이 있다.
전혀 없었다 한 두번 있었다 많이 있었다 매일 있었다

18. 속음을 느꼈다.
전혀 없었다 한 두번 있었다 많이 있었다 매일 있었다

19. 주위 사람들이 나를 싫어 한다는 생각이 들었다.
전혀 없었다 한 두번 있었다 많이 있었다 매일 있다

20. 무슨 일이든 제대로 할 수가 없었다.
전혀 없었다 한두번 있었다 많이 있었다 매일 있었다
Appendix M: The Most Painful Hurt Question

1. Please consider your experiences with the North Korean government. Please recall the most painful hurt you experienced with this regime. Write a brief description of what the North Korean government did to hurt you in this case to remind yourself of the event. If the North Korean government has not hurt you at all, you may state this.

2. Please rate the hurtfulness of this offense, using the scale below. Circle your answer.

1-----------------2-------------------3------------------------4-------------------5

Very little hurt                                             Large amount of hurt

3. Please estimate the time in months since the offense occurred. If it occurred over 1 year ago, give the approximate year and months. For example, 5 years and 3 months.

The offense occurred ________________ years and ________ months ago.

4. Please describe your level of support for the North Korean government prior to the incident.

-2  -1  0  +1  +2

Very Unsupportive                                      Neutral                      Very supportive

5. Please describe your level of support for the North Korean government at the present time.

-2  -1  0  +1  +2

Very Unsupportive                                      Neutral                      Very supportive
Appendix N: The Most Painful Hurt Question (In Korean)

가장 큰 상처

1. 당신이 북한정권에서의 경험한 것을 다시 기억해 보십시오. 당신이 북한의 김정일 정권아래에서 경험한 것 중에서 가장 고통스러웠던 것을 무엇이었는지 생각해 보십시오. 당신이 경험한 고통스런 경험이 중에서 북한정권으로 인해 일어난 일들 중 기억나는 상처를 간략히 기록해 주시면 감사하겠습니다.

2. 당신이 북한 정권아래서 받은 그 아픔은 정도를 아래에 1에서 5의 숫자로 평가해 주십시오.

1------------------------ 2------------------------ 3------------------------ 4------------------------ 5------------------------
받은 상처가 아주적다 받은 상처가 보통이다. 받은 상처가 아주 컸다.

3. 당신이 북한 정권으로 인해 받은 고통이 언제 일어난 생각해보고 기록해 주십시오. 만약 일년이 넘었다면 몇 년 몇 개월 전의 일인지 기록해 주십시오. 예) 5년 3월 전

4. 이 고통스런 일이 일어나기 전에 북한정권을 지지하였는지 정도를 표현해 주십시오.

-2 ------------------------ -1 ------------------------ 0 ------------------------ +1 ------------------------ +2
전혀 지지하지 않았다 지지하지 않았다. 보통이었다. 지지했다 적극적으로 지지했다

5. 당신에게 이 고통스런 일이 일어난 후에 북한정권에 대한 어느 정도 지지하는지 정도를 표현해 주십시오.

-2 ------------------------ -1 ------------------------ 0 ------------------------ +1 ------------------------ +2
전혀 지지하지 않았다 지지하지 않았다. 보통이었다. 지지했다 적극적으로 지지했다
Appendix O: The Decisional and Emotional Forgiveness Scales (DFS/EFS)

The next series of questions ask you to think about the hurtful event you described above in which North Korea government has hurt you in some way. Think of your current intentions or emotions toward the North Korean government that hurt you. Indicate the degree to which you agree or disagree with the following statements. Please answer honestly.

SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree

1. I intend to try to hurt North Korean government leaders the same way they hurt me.
2. I will not try to help North Korean government leaders if they need something.
3. If I see North Korean government leaders, I will act friendly.
4. I will try to get back at the North Korean government.
5. I will try to act toward the North Korean government leaders in the same way I did before they hurt me.
6. If there is an opportunity to get back at the North Korean government leaders, I will take it.
7. I will not talk with North Korean government leaders.
8. I will not seek revenge upon North Korean government leaders.
10. I no longer feel upset when I think of North Korean government leaders.
11. I’m bitter about what North Korean government leaders did to people and me.
13. I’m mad about what happened to my family and me in North Korea.
15. I resent what North Korean government leaders did to my family and me.
16. I feel sympathy toward North Korean government leaders.
Appendix P: The Decisional and Emotional Forgiveness Scales (DFS/EFS) (Korean)

결단적인 용서와 감정적인 용서

다음은 당신이 위에 묘사한 깊은 상처를 주었던 경험에 대한 질문들입니다. 당신이 상처를 주었던 북한정권에 대해 현재 당신이 마음속으로 어떠한 감정을 가지고 있는지를 생각해보십시오. 그리고 다음 사항들에 대해 당신이 어느 정도 동의하는지 혹은 동의하지 않는지를 표시하십시오.

1- 전혀 그렇지 않다- 2 그렇지 않다- 3 중간- 4 그렇다- 5 매우 그렇다

1. 나는 그 사람이 나에게 상처를 준 것과 같은 방법으로 북한 정권의 책임자들에게 상처를 줄 것이다.

2. 나는 북한정권의 사람들이 어떤 도움이 필요하다고 해도, 그 사람을 도와주려고 애쓰지는 않을 것이다.

3. 내가 만약 북한정부의 리더들을 만나게 되면 나는 그들을 친절하게 대할 것이다.

4. 나는 북한정부의 사람들에게 내가 받은 대로 복수를 하고 싶은 마음이 있다.

5. 나는 북한정권의 사람들이 나에게 상처를 주기 이전에 그 사람을 대하면 태도 그대로 그 사람을 대하고 싶다.

6. 만약 북한정부의 책임자들을 만나게 되어서 그 사람에게 갑아줄 기회가 생기면 복수를 하겠다.

7. 나는 북한정부 사람들과는 말도 안하겠다.

8. 나는 북한정권의 책임자들에게 복수하려고 하지는 않겠다.
9. 나는 북한정권의 책임자들이 걱정이 된다.

10. 나는 북한정권의 사람들에 대해 생각할 때 더 이상 나쁜 감정을 느끼지 않는다.

11. 나는 북한에서 그 사람이 나에게 한 일에 대해 비통한 감정이 있다.

12. 나는 김정일과 북한정권의 책임자들에게 대해 동정심을 느낀다.

13. 나는 북한에서의 내 가족과 나에게 일어난 일에 대해 지금도 화가 나있는 상태다.

14. 나는 북한정권을 좋아한다.

15. 나는 북한정부가 나의 가족과 나에게 했던 일들에 대해 분노하게 된다.

16. 나는 북한정부의 책임자들이 불쌍하다는 마음이 있다.
Appendix Q: The Rumination About an Interpersonal Offense Scale (RIO)

The following items describe reactions people can have to being hurt by others. Think back over your experience and indicate your agreement or disagreement with the following statements.

1=strongly disagree (Strg Disagree) to 5=strongly agree (Strg Agree).

1. I can’t stop thinking about how I was wronged by North Korean government.

1-----------------2-----------------3-----------------4-----------------5

2. Memories about this North Korean government’s wrongful action have limited my enjoyment of life.

1-----------------2-----------------3-----------------4-----------------5

3. I have a hard time getting thoughts of how I was mistreated out of my head.

1-----------------2-----------------3-----------------4-----------------5

4. I try to figure out the reasons why this person hurt me.

1-----------------2-----------------3-----------------4-----------------5

5. The wrong I suffered in North Korea is never far from my mind.

1-----------------2-----------------3-----------------4-----------------5

6. I find myself replaying the hurtful events caused by the North Korean government over and over in my mind.

1-----------------2-----------------3-----------------4-----------------5
Appendix R: The Rumination About an Interpersonal Offense Scale (RIO) (Korean)

위의 상처받은 경험을 생각하십시오. 다음의 사항들은 사람들이 상처받는 경우에 그것에 대해 반응하는 행동들을 묘사하고 있습니다. 당신이 상처받은 경험들에 대해 어떻게 경험 했는지를 가장 적합한 답에 O 표하십시오.

1=전혀 그렇지 않다  2=그렇지 않다  3=중간이다  4=그렇다  5=매우 그렇다

1. 나는 북한정부가 나에게 잘못한 것들에 대해 생각하는 것이 멈추어 지지 않는다. (생각이 계속 난다)

   1-----------------2-----------------3-----------------4-----------------5
   전혀 그렇지 않다   중간이다   매우 그렇다

2. 북한정부가 행한 잘못한 것들에 대한 기억이 나면 이것으로 인해 내 삶을 줄기는데 제한이 된다. (나는 기쁨을 누릴 수 없다)

   1-----------------2-----------------3-----------------4-----------------5
   전혀 그렇지 않다   중간이다   매우 그렇다

3. 나는 왜 북한정권이 사람들에게 고통과 상처를 주었는지, 그 이유를 생각해보려고 했다.

   1-----------------2-----------------3-----------------4-----------------5
   전혀 그렇지 않다   중간이다   매우 그렇다

4. 나는 내가 북한정권아래 있을 때 받은 고통들이 기억에서 잊혀지지 않는다.

   1-----------------2-----------------3-----------------4-----------------5
   전혀 그렇지 않다   중간이다   매우 그렇다

5. 나는 내가 상처받은 사건들이 내 머릿속에 반복해서 나타나고 있다.

   1-----------------2-----------------3-----------------4-----------------5
   전혀 그렇지 않다   중간이다   매우 그렇다
Appendix S: Transgression Related Interpersonal Motivations Inventory (TRIM)-9

1= strongly disagree, 2 = mildly disagree, 3 = agree and disagree equally, 4 = mildly agree, 5 = strongly agree

1. ____ I what to make the North Korean government pay.
2. ____ I want North Korean government leaders to get what he/she deserves.
3. ____ I want to get even with the leaders of the North Korean government.
4. ____ I want to see the North Korean government collapse and its government leaders be miserable.
5. ____ I cannot trust the North Korean government now.
6. ____ I’d find it difficult to act warmly toward the North Korean government leaders.
7. ____ I’d avoid North Korean government leaders.
8. ____ I’d cut off the relationship with the North Korean government leaders.
9. ____ I’d withdraw from the North Korean government leaders.
Appendix T: TRIM-9 (Korean)

다음의 사항들은, 위의 상처받은 경험의 가해자에 대한 당신의 현재 생각과 감정들을 묻는 질문들입니다. 각 질문에 대해 가장 적합한 답을 골라 0 표시해주십시오.

1=전혀 그렇지 않다 2=그렇지 않다 3=중간이다 4=그렇다 5=매우 그렇다

1. 나는 북한 정권이 자신들이 잘못한 것들에 대한 대가를 치루도록 만들고 싶다.
2. 나는 북한 정원의 지도자들이 자신들이 저지른 일에 합당한 벌을 받기를 원한다.
3. 나는 북한정권의 지도자들이 한 행위대로 똑같이 갚아 주고 싶다.
4. 나는 김정일 정권이 붕괴되고 비참해지는 것을 보고 싶다.
5. 나는 이제 북한 정부를 신뢰하지 못한다.
6. 나는 북한정권의 리더들에 대해 친근하게 대해 주기 어렵다. (포용하기 어렵다. 용서하기 어렵다)
7. 북한정부의 책임자들을 피하고 싶다. (관심이 없다)
8. 나는 북한정권의 리더들과의 관계는 단절할 것이다.
9. 나는 북한정부의 리더들로부터 물러나고 싶다. (대하여 더 이상 관심을 갖기 싫다)
Appendix U: Types of Hurts

Please check any of the hurtful experiences below that you experienced with the North Korean government. Rate the level of hurtfulness of the incident according to the scale below:

☐ Eyewitness to a family member, relative, or close neighbor dying of starvation.
   1----------------------- 2------------------------ 3--------------------- 4------------------- 5
   Not       hurtful          hurtful          Extremely hurtful

☐ Eye witnessing to the punishment of an acquaintance for political misconduct.
   1----------------------- 2------------------------ 3--------------------- 4------------------- 5
   Not       hurtful          hurtful          Extremely hurtful

☐ Inability to help a family member or relative who suffered or has died from a disease.
   1----------------------- 2------------------------ 3--------------------- 4------------------- 5
   Not       hurtful          hurtful          Extremely hurtful

☐ Eyewitness to a public execution of a non-family member or relative.
   1----------------------- 2------------------------ 3--------------------- 4------------------- 5
   Not       hurtful          hurtful          Extremely hurtful

☐ Eyewitness to a public execution of family member or relative.
   1----------------------- 2------------------------ 3--------------------- 4------------------- 5
   Not       hurtful          hurtful          Extremely hurtful

☐ Punishment for a family member’s or relative's political misconduct (non-public execution)
   1----------------------- 2------------------------ 3--------------------- 4------------------- 5
   Not       hurtful          hurtful          Extremely hurtful

☐ Agony over family’s political background (eg., parents who defected from South Korea)
   1----------------------- 2------------------------ 3--------------------- 4------------------- 5
   Not       hurtful          hurtful          Extremely hurtful
Appendix V: Types of Hurt (In Korean)

북한정권아래서의 상처

아래 항목 중 당신이 북한정권아래에서 경험한 것을 아래 항목 중에서 모두 체크(✓) 하십시오. 그리고 그 상처의 정도를 1에서 5 사이로 표 해주십시오.

■ 가족이나 친척 가까운 이웃 중에 굶어 죽은 사람을 목격하거나 소식을 들은 적이 있다.

1. 전혀고통받지 않았다  2. 고통스러웠다  3. 아주고통스러웠다

■ 내가 아는 사람 중에 정치적 과오로 처벌받는 것을 보았다.

1. 전혀고통받지 않았다  2. 고통스러웠다  3. 아주고통스러웠다

■ 가족이나 친척이 질병으로 큰 고통을 받았거나 질병으로 사망했는데 도움을 주시 못했다.

1. 전혀고통받지 않았다  2. 고통스러웠다  3. 아주고통스러웠다

■ 다른 사람이 공개처형 당하는 것을 목격하였다(가족이나 친척 아닌 다른 사람의 처형)

1. 전혀고통받지 않았다  2. 고통스러웠다  3. 아주고통스러웠다

■ 다른 사람이 공개처형 당하는 것을 목격하였다(가족이나 친척의 공개처형)

1. 전혀고통받지 않았다  2. 고통스러웠다  3. 아주고통스러웠다

■ 가족이나 친척들의 정치적 과오 때문에 처벌(공개처형 아닌 처벌)을 받는 것을 보았다.

1. 전혀고통받지 않았다  2. 고통스러웠다  3. 아주고통스러웠다
가족의 정치적 출신 성분 때문에 고통을 당했다.
1. 전혀 고통 받지 않았다  2. 고통스러웠다  3. 아주 고통스러웠다

감사합니다. 설문 응답을 모두 마치셨습니다. 응답하신 설문지를 준비된 봉투에 넣어주시면, 수집자가 연구자에게 전달하게 됩니다. 수집자 없이 개인이 직접 설문에 응답하셨다면, 동봉된 반송봉투나 우편 봉투에 넣으셔서 아래 연구자에게 보내주십시오!

지금까지의 설문 내용에 궁금한 사항이 있으시면 아래의 연락처로 문의해 주십시오.

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설문에 끝까지 응해주셔서 대단히 감사합니다.
Appendix W: Instruction for Facilitators

1. The facilitator of the survey will explain aloud to the participants the survey information quoted below prior to distributing the survey questionnaires. After the participants are ready in place, please explain the following study information to them.

“You are invited to participate in a survey that will help researchers investigate the relationship among social adaptation, religious commitment, unforgiveness, forgiveness style and self-reported mental health among North Korean refugees. This survey is anonymous. Your responses will not be associated with you in any way and will remain strictly confidential. No one outside of the researchers will look at your responses and all the collected copies from many organizations and churches, including yours, will be randomly shuffled. There are no right or wrong answers. The survey is part of a research project by Jin Uk Park, a doctoral candidate at Liberty University. After you complete your responses to all the questions, you will place the survey into the box. The box will be directly sent to the researcher. To ensure your privacy, I am never allowed to even touch your completed survey. This is a significantly important part of this study, which may be able to provide significant understanding of the spiritual aspect of the adjustment process and mental health among North Korean refugees.”

2. In case the participants ask a question and the facilitator does not know the answer, the facilitator can contact the main researcher by using the cell phone number given.

3. Facilitator needs to hand the survey questionnaires out to the participants.

4. It will take about 30-40 minutes. Please do NOT touch the responded survey copies, but make the participants put it into the box by themselves.
5. Once all are collected in the box, please seal the box and give it to the researcher via any possible method (directly or by mail). Facilitator will be reimbursed by the researcher for the mailing fee.

**The contact information of the researcher:**
Name: Jin Uk Park
Phone#: 1-571-239-5959 (cell) 1-703-670-0098
Address: 15304 Lord Culpeper ct, Woodbridge, VA 22191 (USA)

**Counseling center contact information**
Talbukjajiwon-center (Support Center for North Korean Defectors) 1577-6635 (Korea)
Korean American Counseling Center, 703-761-2225 in U.S.
1952 Gallows Rd #340 Vienna Vienna, VA 22182 (USA)
Appendix X: Letters to Organizations of North Korean Defectors

Dear ……………

I am writing to seek help from you in my research project. Currently I am conducting a research for my Ph.D. dissertation at Pastoral Counseling with Liberty University, Lynchburg, Virginia, USA. I am currently conducting a study on the relationship between spirituality and mental health of North Korean defectors, titled “A study of social injustice and forgiveness in the case of North Korean refugees”. The effect of religiosity on mental health is an essential factor that has not been explored in previous studies for North Korean refugees. Understanding the process of social adaptation and the potential impeding influence of unforgiveness may be critical for helping North Korean refugees move toward overcoming past trauma. Thus, results of this study may be an important initial step to help the refugees in transforming the pain from their past and releasing incapacitating emotions, and unresolved anger.

All participants will be informed about the purpose of this study and about guarantee of anonymity and confidentiality. A gift of 10,000 won ($10) of compensation will be given to participants with permission from your organization. I prefer to be present when surveys are given. However, if necessary, surveys could be conducted by facilitator who is well trained North Korean refugee facilitator. The total time needed for completing this survey is about 30-40 minutes. Please give us your permission to conduct this survey in your organization.

If you have any questions or comments regarding this study, please feel free to contact us at 1-571-239-5959 or jinukpark@liberty.edu.

Sincerely yours.

Jin Uk Park
Appendix Y: Sample Memorandum of Understanding

Dear………

Thanks for your understanding of the mental health conditions of North Korean refugees.

I, as executive director of North Korean defector association, have reviewed all of the materials related to the study being conducted by Jin Uk Park from Liberty University (contact information: 571-239-5959 or email: jinukpark@liberty.edu). As the director of this organization, I authorize Jin Uk Park to conduct his study “A Study of the Social Injustice and Forgiveness in the Case of North Korean Refugees”.

I am informed about all essential information of the study. Also, I have received a copy of the informed consent form and survey invitation. I sign my name freely and voluntary to allow that you or facilitator may come to our meeting and conduct the survey. Also, Mr. Park or facilitator may obtain a written consent from the members of our organization.

Sincerely yours.

Directors’s Name_____________________

Name of the organization__________________

Date:

Signature: