

Forgiveness, revenge, and adherence to Islam as moderators for psychological wellbeing and depression among survivors of the 1990 Iraqi invasion of Kuwait

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Abstract

This study examined the relationships of forgiveness, desire for revenge, adherence to Islam, depression, and psychological wellbeing among 220 Muslim Kuwaiti civilians who experienced the 1990 Iraqi invasion of Kuwait and subsequent seven-month occupation. Participants completed the Enright Forgiveness Inventory (EFI), the Transgression-Related Interpersonal Motivations Inventory-18 (TRIM), the Displaced Aggression Questionnaire (DAQ), the Beck Depression Inventory (BDI), and two sub-scales of Psychological Wellbeing (PSWB). An instrument of 13 items was designed to measure adherence of Islam and the degree to which Islam informs forgiveness attitudes. Results found support for the benefits of forgiveness in that interpersonal forgiveness (EFI) was negatively correlated with depression and revenge. Revenge was negatively correlated with depression and psychological wellbeing. Results also indicated that Islamic forgiveness attitudes moderated the relationship between Islamic devotional practices with

forgiveness of Iraqis and revenge. Increases in Islamic forgiveness attitudes led to increased forgiveness of Iraqis and decreased revenge. These findings appear to suggest that Muslim, Middle Eastern war survivors' forgiveness may be related to some beneficial psychological outcomes. Moreover, a belief that Islam is a forgiving religion appears to help facilitate the forgiveness process. Implications for research and future practice are also discussed.

Keywords: Psychology, Forgiveness, Revenge, Islam, Kuwait

Kuwait, a small Middle Eastern country bordered by Iraq, Saudi Arabia, and the Persian Gulf, was terrorized on August 2, 1990 when Saddam Hussein's Iraqi Republican Guard invaded and subsequently occupied the country for more than seven months. During this time, Kuwaitis experienced a number of tragic and horrific human rights violations. Kuwaitis were murdered, raped, and tortured, and the Iraqi army had full access to all of Kuwait City (the country's only city) and vandalized and looted homes, schools, hospitals, and governmental buildings (Bernhard, Barish, Al-Ibrahim, & Flynn, 1992). A total of 605 people are still missing and assumed dead (Hedges, 1994).

Psychological Effects of the Iraqi Invasion

The Iraqi invasion was perhaps the most significant event in Kuwait's modern history, and caused significant mental health problems for the vast majority of the population (Ibrahim, 1992). The Ministry of Education (Eissa & Nofel, 1993) in Kuwait examined the influence of the Iraqi invasion on 2781 children ages 7 to 17, and found that most children in the sample experienced war-related traumas that led to symptoms of PTSD which varied from mild to very severe. The study also indicated a high correlation between exposure to war and severity of PTSD symptoms. Despite the small sample size, a study of 54 children (ages 8 to 17) by Nader and colleagues (1993) found that 70% of the sample reported moderate to severe PTSD, and that witnessing death, injury, and violent images on television significantly increased the severity of symptoms. Furthermore, those children who actively participated in the resistance by hurting another person tended to have more severe symptoms of PTSD than those who had not been party to physical altercations. After the Gulf War, children who were exposed to violence demonstrated greater difficulty with impulse control and more somatic complaints (Nader & Pynoos, 1993; Nader & Fairbanks, 1994). Many adults also reported heightened levels of anxiety and PTSD (Abdel-Khalek, 2004; 1997a; Al-Naser, Al-Khulaifi, & Martino, 2000). What is especially notable is that these adverse psychological effects appear to have been maintained for several years following the war and Kuwait's liberation (Abdel-Khalek, 1997; 2004; Al-Naser et al., 2000). Because Kuwaitis have

suffered significant and long-lasting psychological pain from the invasion, it is important to better understand how forgiveness may promote mental health.

Forgiveness

Although scholars may disagree on the precise definition of forgiveness, it is a phenomenon in which many people have had personal experience. The study of forgiveness has historically been embedded in the disciplines of theology (e.g., McCullough & Worthington, 1999), philosophy (e.g., North, 1987; Holmgren, 1993; Lang, 1994), and psychology (e.g., Enright, 1991; McCullough, Worthington, & Rachal, 1997; Worthington, 1998; Wade & Worthington, 2003). This study operationalizes the concept of forgiveness set forth by Enright and the Human Development Study Group (1991), which defines forgiveness as a process in which someone who has been unjustly hurt not only voluntarily releases anger, resentment, and the right to retaliate against the offender, but they ultimately come to a point when they can offer the offender a moral gift of love and beneficence. Forgiveness is seen as an independent process of mercy on the part of the victim with the goal of healing from the psychosocial consequences of the offense. Forgiveness may occur without apology or repentance on the part of the offender. Forgiveness is an inherently moral act and offered to the offender unconditionally and without the expectation of justice for the offense.

McCullough (2000) has been especially attentive to the motivational and prosocial aspects of the forgiveness process and have posited that people tend to have three primary motivations that occur as a result of an interpersonal offense: 1) Motivation to avoid the offender both psychologically and personally; 2) motivation to seek revenge against the offender; and 3) motivation toward benevolence toward the offender. These emotional motivations are thought to collaborate to govern the psychological state of forgiveness. When people have not yet forgiven, they will be motivated to avoid the perceived offender and will desire revenge. Conversely, the victim has likely forgiven when the victim no longer avoids the offender, does not desire revenge, and feels beneficence toward the offender.

Forgiveness in the Middle East

The psychological process of forgiveness has been shown to have some cross-cultural significance (Enright & Fitzgibbons, 2000), though forgiveness research specific to the Middle East is somewhat limited. However, some research has shown Kuwaitis to have a high level of willingness to forgive, especially when an apology has been offered (Ahmed, Azar, & Mullet, 2007). This high willingness to forgive has also been found with survivors of the civil war in Lebanon, even across six major religious groups (Azar & Mullet, 2002). Among

Lebanese populations, educational level has been shown to be a primary social factor correlated with forgiveness, with those with higher levels of education more prone to forgiveness than those with lower levels of education (Azar, Mullet, & Vinsonneau, 1999). The propensity to forgive among both Kuwaitis and Lebanese is largely based on the cessation of consequences and the presence of apologies from the offender. Kuwaitis' increased willingness to forgive based on cessation of consequences and the presence of apologies is especially important given that little reparation or contrition from Iraq was offered. Because the invasion of Kuwait occurred 25 years ago, the effect of time is another factor that may facilitate Kuwaitis' forgiveness.

Revenge

Scholars have long debated the motivation for revenge. McCullough, Bellah, Kilpatrick, and Johnson (2001) argued that revenge is motivated by a desire to get even, teaching the target a moral lesson, and restoring one's sense of self-worth. Although there is overarching purpose behind vengeance, it is correlated with a number of negative social and psychological behaviors including suicide (Hendon, 1991), and physical aggression (Holbrook, 1997; Green & Stonner, 1973).

Much of the research conducted in Western societies tends to indicate that revenge is a maladaptive reaction to an unjust offense that if carried out, can lead to more problematic psychosocial states. However, it has been suggested that revenge is a long-standing Arab tradition and taking revenge is considered a person's right or duty (Jabbur, 1995). The Arabic term for revenge, *tha'r*, means to ask for blood and/or to kill the killer. Revenge in many Arab cultures is not an individual process, but rather a collective guarantee provided by the group to all its members (Jabbur, 1995). Historically, in parts of the Arab world where formal governments or courts of law did not exist, revenge provided an amount of security and a possible deterrent from offending another family or group since it would almost ensure a counterattack of equal proportion to restore social symmetry (Al-Krenawi & Graham, 1999). Therefore, it is important to understand the role of revenge among Kuwaiti survivors of the Iraqi invasion and its relationship to psychological wellbeing.

Religion

People's decision to forgive or seek revenge can be informed by their religion as it provides a framework to guide the way in which people ought to live their lives. People reflect on the moral and ethical standards put forth by their particular faiths when faced with challenges that range from day-to-day difficulties to profoundly disturbing experiences. The concept of forgiveness is addressed

by every major world religion including Christianity, Judaism, Buddhism, and Islam. When people feel wronged, they may look to their religious teachings to guide their decision about whether or not they should forgive.

Because of the perceived link between forgiveness and religion, McCullough and Worthington (1999) reported a commonly held belief that those who are more religious tend to be more forgiving than their less-religious counterparts. However, research appears to indicate that religiosity has little to no effect on levels of forgiveness for an interpersonal transgression. This phenomenon has been dubbed the *religion-forgiveness discrepancy* (McCullough and Worthington, 1999; Tsang, McCullough, and Hoyt, 2005). Tsang and colleagues (2005), offer two possible reasons for the discrepancy: 1) The way forgiveness is often measured might obscure a positive relationship between religiousness and forgiveness; and 2) religions can provide multiple meanings and guidelines, which might allow people to self-select certain actions that are antithetical to forgiveness but are within the realm of their religious teachings.

Although research on Western populations tends to find a negative correlation between religious adherence and forgiveness, some research has compared forgiveness attitudes comparing specific religious groups using a Middle Eastern sample. Research comparing Lebanese Muslims, Lebanese Christians, and French Christians has found that Muslims tend to have lower scores of unconditional forgiveness respective to their Christian counterparts and seem to be more forgiving when an apology has been offered (Mullet & Azar, 2009; Azar & Mullet, 2002).

In addition to informing forgiveness practices, religion is also often used as a method of coping with life stressors. Pargament (1990, 1996, & 1997) has suggested that a religious coping model might explain the strong link between religion and psychological wellbeing. Pargament's religious coping theory asserts that religion can help people cope by explaining or making meaning of stressful events and to help people come to term with adverse life events. Pargament also views religious coping as a mediating factor in the relationship between religious orientation and psychological wellbeing. Pargament has offered a two-factor model of religious coping, consisting of negative and positive religious coping, which encompasses a number of coping styles including religious forgiveness, collaborative religious coping, spiritual connection, and religious purification.

Islam offers its adherents a framework to help guide behavior, health, politics, and laws, and some evidence suggests that Islam may indeed be related to psychological wellbeing. For example, Baroun (2006) investigated the relationship between religiosity, health, happiness, and anxiety among 941 Kuwaiti adolescents and found that anxiety and intrinsic religious motivation were negatively correlated, suggesting that religion may in fact act as a buffer from anxiety. Some research using Muslim participant samples has also indicated

that high scores on religious commitment, as it relates to both the level of belief and practice, tend to mitigate death distress (e.g., anxiety, depression, and obsession regarding death and one's mortality; Suhail & Akram, 2002). Similarly, Roshdieh, Templer, Cannon, and Canfield (1999) studied 1,717 Iranian Muslim college students exposed to war-related events during the 1980–1988 Iran-Iraq war. Those who were more exposed to war-related traumatic events and those who were less religious, had higher death anxiety and death depression. Similarly, in a study of 570 Muslim female college students living in Cairo, Egypt, Al-Sabwah and Abdel-Khalek (2006) found that religiosity was inversely related to both death anxiety and death depression.

The Present Study

Based on the current body of literature, what requires further clarification is how forgiveness and revenge are related to variables of psychological well-being and depression, and how forgiveness attitudes that are grounded in Islam will facilitate the forgiveness process. Thus, the central purpose of this study is to understand the relationships between forgiveness (of both specific offenders during the war and Iraqis in general), desire for revenge, Islamic devotional practices and forgiveness attitudes, and psychological well-being and depression among Muslim Kuwaitis who experienced a war-related trauma during the 1990 Iraqi invasion of Kuwait. In addition to clarifying the relationships among the aforementioned variables, the study investigated the following three hypotheses:

- 1) Desire for revenge mediates the relationship between interpersonal forgiveness and depression.
- 2) Islamic forgiveness attitudes will moderate the relationship between Islamic devotion and forgiveness of Iraqis.
- 3) Islamic forgiveness attitudes will moderate the relationship between Islamic devotion and revenge.

Method

Participants

Participants included 220 survivors of the Iraqi invasion who self-identified as Muslim (any denomination) and were able to read Arabic or English. The sample population comprised 38.6% male and 60.9% female participants, and they ranged in age from 29 to 77 years old ($M=35$, $SD=9.06$). Participants reported their marital status, and 61.8% were married, 31.8% single, 4.1% divorced, 1.4%

separated, and .5% widowed. Regarding participant education, the highest degree earned ranged from some high school to graduate and advanced degrees, with 59.1% having attained a college degree, 16.4% attained a graduate or advanced degree, 12.7% attained some college, 8.2% attained a high school diploma, and 2.7% reported having some high school education. By religion, 83.6% reported being Sunni, 14.1% were Shi'a, and 1.8% reported being a member of an "other" Islamic denomination. In terms of annual income, 21.4% earned \$75,000 or more, 33.2% reported earning between \$37,000–\$74,000, 21.4% earned between \$18,000–\$36,000, and 21.4% earned less than \$18,000. Participants also reported their political views with the majority reporting moderate political views at 55.9%, 16.4% reported liberal political views, 11.4% were very liberal, and 11.4% were conservative, 1.8% were very conservative, and 2.3% reported their political views as being "other" and gave no further information.

Participants reported levels of injury from the invasion that ranged from no hurt to a great deal of hurt with 19.5% reporting much hurt, 19.1% reporting some hurt, 17.3% a great deal of hurt, 14.1% a little hurt, and 5.9% reported experiencing no hurt during the invasion. The Enright Forgiveness Inventory also asks participants to write a brief description of the nature of their hurt. The majority of participants reported being directly hurt physically or psychologically (33.2%; e.g., having a gun pointed at them, or being verbally harassed or intimidated at a checkpoint), 15.9% reported hurts related to damage to Kuwait (e.g., being upset that a neighboring country would invade Kuwait or the damage that was done to Kuwait and its social infrastructure), 8.6% had a family member hurt or killed, 5% reportedly were hurt by forced separation from family, 2.7% reported having a friend hurt/killed, 1.4% reported a loss of material items, and .5% witnessed a stranger being hurt or killed.

Participants were also asked whom they blamed for the hurt they experienced. The majority of participants reported that they blamed the Iraqi army for their hurt (43.2%), while 15% blamed Iraq as a whole, 5.9% blamed individual soldiers, 3.6% blamed Saddam Hussein, and .9% blamed Palestinians; God and Kuwait were both blamed by .5% of the study participants.

Participants were recruited from five primary sources: 1) Human rights organizations that work with survivors of the Iraqi invasion and family members of prisoners of war (POWs; $n = 22$); 2) academic institutions including grammar schools, high schools, and universities ($n = 84$); 3) a nonprofit rehabilitation clinic ($n = 39$); 4) various government ministries and offices (e.g., Ministry of the Interior and the Society for the Planning and Improvement of Kuwait; $n = 23$); and 5) through word of mouth using a snowballing technique ($n = 52$). Contacts were provided with a brief description of the study and were asked if they would be willing to participate in the study, and if they knew others who might be interested. Some surveys were completed individually while others were done in groups. A total of 284 surveys were

distributed, with 220 (77%) returned. Participants received no material compensation for their participation.

Instrumentation

All measures were professionally translated into simple modern standard Arabic according to recommendations set forth by the health care literature (Maneesriwongul & Dixon, 2004). To ensure accuracy and equivalence of the measures' wording and semantics, measures were translated from English into Arabic and then back-translated into English. This procedure did not apply to the Beck Depression Inventory (BDI-II) because it was already translated into Arabic (Al-Ansari, 2005; Abdel-Khalek, 1998).

Enright Forgiveness Inventory (EFI). The EFI (Subkoviak et al., 1995) is a 60-item self-report measure that assesses the degree to which one has forgiven a specific individual for a particular interpersonal offense. Items use a 6-point Likert-type scale that examine respondents' negative and positive *affect* toward the offender (e.g., "I feel _____ toward him/her."), negative and positive *behavior* (e.g., "Regarding the person, I do or would _____."), and negative and positive *cognitions* toward the offender (e.g., "I think he or she is _____."). Scores range from 60 to 360 with higher scores reflecting greater levels of forgiveness.

Substantial empirical evidence supports the Enright Forgiveness Inventory's (EFI) reliability and validity with Cronbach's α (.95-.99; Subkoviak et al., 1995; Orcutt, 2006; Reed & Enright, 2006). Cross-cultural validity and reliability data report internal consistency of at least .95 (Enright & Fitzgibbons, 2000); the EFI's coefficient alpha for this study was .96.

The means of the individual items ranged from 1.88 to 4.10, with a mean of 169.13 (mean item response was 5.4; $SD=52.60$) for the total scale. The mean total scale score of 169.13 is very low by comparison of research done with U.S. samples, which tend to be around 259. The relatively low score suggests that participants tended to not be very forgiving of individual offenders. The low forgiveness score also suggests that participants were not likely to be purposely responding positively to the items to appear more favorable to the researcher, an important consideration given the sensitivity of the topic at hand.

The Transgression-Related Interpersonal Motivations Inventory-18 (TRIM). The TRIM measures the reduction of one's negative motivations (i.e., avoidance and revenge) toward a transgressor and restoring one's positive emotions (i.e., benevolence) toward a transgressor (McCullough et al., 1998). The measure consists of the following three subscales and all three were used to assess for forgiveness of Iraqis in general: 1) *Avoidance*; 2) *Revenge*; and 3) *Benevolence*. All 18 items are rated on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). The measure's individual items were altered to allow for a more specific examination of participants' thoughts and feelings about

Iraqis. The pronouns used in the original TRIM (i.e., him/her) were replaced with “Iraqis.” For example, original TRIM items of “I don’t trust him/her” and “I want to see him/her hurt and miserable” were edited to read, “I don’t trust Iraqis” and “I want to see Iraqis hurt and miserable.”

The Cronbach’s alpha for this study was .97, indicating a high degree of internal consistency among the scale’s items. The means of the individual items ranged from 2.69 to 3.90. The mean for the total scale was 60.31 (mean item response was 3.3; $SD=13.79$).

Psychological Wellbeing Scale (PSWB). The Psychological Well-Being Scale measures positive mental health in six aspects of functioning, including autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. The total scale consists of 42 items and the response format for all items is based on a Likert-type scale ranging from 1 (*disagree strongly*) to 6 (*agree strongly*). For the purposes of this investigation it was suggested that in lieu of using the full scale, individual constructs and their associated 14-items be used (Ryff, personal communication, April 27, 2007). Therefore, this investigation used the subscales of environmental mastery (i.e., a high scorer reflects mastery and competence in managing the environment; control of a complex array of external activities; makes use of surrounding opportunities; and ability to choose or create contexts suitable to personal needs and values) and self-acceptance (i.e., a high scorer possesses a positive attitude toward the self; acknowledges and accepts multiple aspects of self including good and bad qualities; and feels positive about things that have occurred in the past).

Environmental mastery was chosen because being exposed to profoundly unsettling events such as war and violence can often cause people to feel out of control or lacking in mastery over their environment. Self-acceptance was chosen because it is a general measure of self-esteem and belief in self-worth, a psychological dimension that is commonly associated with happiness, hope, and contentment. Examples of items from the self-acceptance subscale are “My attitude about myself is probably not as positive as most people feel about themselves” and “I feel like many of the people I know have gotten more out of life than I have.” Examples of items on the environmental mastery subscale are “In general, I feel I am in charge of the situation in which I live” and “I have difficulty arranging my life in a way that is satisfying to me.” Because of possible cultural variations in the way individuals conceptualize and exemplify their sense-of-self and their sense of mastery of the environment, both of these subscales (in addition to the full-PSWB scale) have been used with a variety of non-U.S. samples, including some samples that tend to be more collectivistic in nature (e.g., Cheng & Chan, 2005; Van Dierendonck, 2004; Diaz et al. 2006).

The PSWB has been used extensively with nearly two decades of empirical support. The full scale and the subscales have been translated into several

languages and used around the world with a broad range of population samples (e.g., Antonelli & Cucconi, 1998; Cheng & Chan, 2005; Diaz et al. 2006). Internal consistency for the subscales and the total scale are consistently high. Internal consistency coefficients for the individual scales of environmental mastery have been reported at .90 and .93 for self-acceptance (Ryff, 1989).

The coefficient alpha for the environmental mastery subscale for this study was .77, suggesting a fair amount of internal consistency among the scale's variables. Means for individual items ranged from 3.02 to 4.94 and the mean for the total scale was 59.48 ($SD=9.84$). The coefficient alpha for the self-acceptance subscale for this study was .60, indicating a marginal amount of internal consistency. Individual items ranged from 2.33 to 5.27 and the mean score for the scale was 59.25 ($SD=10.01$). The coefficient alpha was .78 when the measures were combined.

The Beck Depression Inventory Second Edition (BDI-II). The Beck Depression Inventory Second Edition (BDI-II) was developed by Beck, Steer, and Brown (1996) to measure symptoms of depressive disorders. The BDI-II is a widely used self-report measure consisting of 21 items. Each item is rated on a scale ranging from 0 (normal) to 3 (most severe). The BDI-II has been translated into Arabic and has been widely used with clinical and nonclinical Arabic speakers living in 19 Middle Eastern and North African countries (Ghareeb, 2000; Al-Musawi, 2001; Al-Ansari, 2005). The Arabic version of the BDI-II has also been validated with a Kuwaiti population, with Cronbach's alphas reported between .86 and .89 (Abdel-Khalek, 1998). The coefficient alpha for this study was .88. Mean scores for individual items ranged from .09 to 1.13 and the mean total scale score was 12.42 ($SD=9.05$).

The Displaced Aggression Questionnaire (DAQ). The Displaced Aggression Questionnaire (DAQ) measures individual differences and trait characteristics in the tendency to displace aggression (Denson, Pedersen, & Miller, 2006). To identify particular dimensions that underlie trait displacement of aggression, the DAQ uses three subscales: 1) Angry Rumination Subscale, which measures the *affective* tendency to focus on one's anger following a provocation; 2) Revenge Planning Subscale which measures a *cognitive* component of holding a grudge and planning for retaliation; 3) Behavioral Displaced Aggression Subscale, which examines a *behavioral* component in one's general tendency to behave aggressively toward those uninvolved with the initial provocation. The scale consists of 31 items that use a Likert-type format (1 = *extremely uncharacteristic of me* to 7 = *extremely characteristic of me*). Example of the measure's items are as follows: "I keep thinking about events that angered me for a long time" (angry rumination); "The more time that passes, the more satisfaction I get from revenge" (revenge planning); "When someone or something makes me angry I am likely to take it out on another person" (behavioral displaced aggression).

The coefficient alpha for this study was .94, indicating a high degree of internal consistency among the scale's items. The mean scores for individual items ranged from 2.08 to 4.25 and the mean total scale score was 98.52 ($SD=35.89$).

Adherence to Islam. Adherence to a religion has been measured in a number of ways including participation in religious activities (e.g., frequency of prayer or frequency of church attendance), attitudes toward one's religion, and adherence to religious creed (Hill & Hood, 1999). However, such measures tend to be solely for use with Christians and focus largely on the degree to which one adheres to that religious faith. Furthermore, these general scales of religious adherence are unable to measure the subtleties of how religion influences one's everyday behavior and attitudes (e.g., how religion might influence forgiveness and vengeful attitudes). Therefore, for the purposes of this study, these measures would not be useful or relevant. For this reason, a measure was created to address particularities of how religion influences forgiveness and vengeful attitudes.

The Islam scale consisted of 13 total items (4 items are related to religious devotional behavior, 9 items are related to Islamic forgiveness attitudes). Religious practices were measured using the following questions: "How often do you read the Qur'an," "How often do you observe the five daily prayers," "How often do you refer to religious teachings when making important decisions about your life." These items were scored using a 5-point Likert-type scale (1 = *Never* to 5 = *Everyday*).

Nine items address how Islam influences forgiveness attitudes. Sample items include the following: "I believe Islam encourages forgiveness;" "I believe that Islam permits retaliation in certain situations;" and "My religious community would understand if I retaliated against someone who hurt me." Items use a 5-point Likert-type scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*). The scale was reviewed by 22 Kuwaitis to ensure cultural validity (mean age = 32; all were Sunni, self-identified as "very religious," and were recruited using a snowballing technique).

The Cronbach's alpha for the overall adherence to Islam scale was .75, which suggests a good amount of internal consistency among the scale's items. Mean scores for individual items ranged from 2.77 to 4.60 and the mean total scale score was 48.76 ($SD = 7.40$). The Islamic devotion subscale yielded item mean scores of 3.70 ($a = .85$); Islamic forgiveness attitudes subscale yielded item mean scores of 4.10 ($a = .67$). For reference, the Adherence to Islam scale is provided at the end of the document.

Procedure

The survey packets contained a letter of introduction, a demographics form and the following instruments (the sequence of which were randomized to control

for order effects): A) The Enright Forgiveness Inventory; B) The Transgression-Related Interpersonal Motivations Inventory-18; C) The Psychological Well-Being Scale; D) The Beck Depression Inventory; E) The Displaced Aggression Questionnaire; and F) Adherence to Islam. The survey packets were available in English and Arabic (83% were completed in Arabic).

Results

Demographics

A series of group mean differences (*t*-tests and ANOVAs) analyses determined whether participants varied on their levels of forgiveness in both interpersonal forgiveness (i.e., EFI) and group-level forgiveness of Iraqis in general (i.e., TRIM-18) by demographic variables. A significant difference ($p < .05$) in interpersonal forgiveness (EFI) by gender was found with males tending to have higher scores than females ($M_s = 177$ and 161 , $SD_s = 51.7$ and 47.3 , respectively). Although both women and men reported moderate levels of hurt from the invasion, women reported slightly higher levels of hurt than men ($M = 3.4$, $SD = 1.21$ and $M = 3.2$, $SD = 1.26$, respectively). The level of hurt, as recorded by the Enright Forgiveness Inventory (EFI), was positively correlated with interpersonal forgiveness ($r = .57$, $p < .01$) and negatively related to revenge (DAQ) ($r = -.20$, $p < .01$). Those who were outside of Kuwait during the invasion also reported higher mean scores of hurt ($M = 3.6$, $SD = 1.18$) than did those who were in Kuwait at the time of the invasion ($M = 3.2$, $SD = 1.23$).

A significant difference ($p < .05$) was found in interpersonal forgiveness by educational level, with those participants who reported an educational level of high school diploma and below reporting greater interpersonal forgiveness ($M_s = 178.1$ and 166.1 , $SD_s = 54.2$ and 49 , respectively). The aforementioned mean scores of interpersonal forgiveness suggests that most participants were unforgiving of people or groups whom they specifically blamed for the deepest hurt they experiences during the invasion.

When examined by Islamic denomination (i.e., Sunni vs. Shi'a) a significant difference ($p < .05$) was found in levels of forgiveness of Iraqis in general, with Shi'as reporting greater forgiveness of Iraqis in general (TRIM-18; $M_s = 53.6$ and 46.1 , $SD_s = 12.1$ and 13.7 , respectively). Mean scores on forgiveness of Iraqis in general (TRIM-18) indicate that Shi'as were moderately forgiving of Iraqis in general, yet Sunnis were less forgiving. This finding was in spite of the fact that Shi'as tended to report higher levels of hurt from the invasion ($M = 3.5$, $SD = 1.12$ on EFI cover sheet) than Sunnis ($M = 3.3$, $SD = 1.26$ on EFI cover sheet). No significant differences in levels of interpersonal forgiveness or forgiveness of Iraqis in general were found by annual income or political views.

Table 1. Descriptives and Correlations of Study's Variables for Total Sample

Variable	α	M	SD	1	2	3	4	5	6	7
EFI	.97	2.79	.97	—						
DAQ	.94	3.18	1.15	-.34**	—					
TRIM	.90	2.64	.76	.29**	-.24**	—				
PSWBEM	.77	4.24	.70	.13	-.28**	.05	—			
PSWBSA	.60	4.23	.71	.06	-.38**	.01	.50**	—		
BDI	.88	.59	.41	-.15*	.41**	-.09	-.47**	-.55**	—	
ISLAM	.85	3.70	4.64	-.11	-.09	-.27**	.09	-.07	-.00	—

Notes. EFI = Enright Forgiveness Inventory; DAQ = Displaced Aggression Questionnaire; TRIM = Transgression-Related Interpersonal Motivations Inventory-18; PSWBEM = Psychological Well-Being Environmental Mastery; PSWBSA = Psychological Well-Being Self-Acceptance; BDI = Beck Depression Inventory; ISLAM = Islamic devotion subscale.

* $p < .05$; ** $p < .01$

The Islam measure was separated into two subscales: 1) Islamic devotion (items 1, 2, 3, and 13; $\alpha = .85$; $M = 3.70$, $SD = 4.64$) and Islamic forgiveness attitudes (items 4 through 12; $\alpha = .65$; $M = 4.10$, $SD = 3.38$). The mean score of Islamic devotion suggested that the sample scored relatively high on Islamic devotion and related that their various Islamic practices and rituals occurred nearly “several times a week.” The mean score of Islamic forgiveness practices suggested that the sample largely agreed that Islam endorses forgiveness.

Relationships among the variables

Correlational coefficients were computed for relationships among all of the study's variables (see Table 1). Interpersonal forgiveness (EFI), was negatively correlated with a desire for revenge (DAQ; $r = -.34$, $p < .01$) and depression ($r = -.15$, $p < .05$), yet it was positively correlated with forgiveness of Iraqis in general ($r = .29$, $p < .01$). Interpersonal forgiveness (EFI) was not significantly related to psychological wellbeing environmental mastery (PSWBEM) ($p > .09$) or psychological wellbeing self-acceptance (PSWBSA) ($p > .43$). Moreover, forgiveness of Iraqis in general (TRIM) was negatively correlated with a desire for revenge ($r = -.24$, $p < .01$), but was not significantly related to depression ($p > .55$), psychological wellbeing environmental mastery ($p > .05$), or psychological wellbeing self-acceptance ($p > .50$).

Desire for revenge (DAQ) was negatively correlated with psychological wellbeing environmental mastery ($r = -.28$, $p < .01$), psychological wellbeing self-acceptance ($r = -.38$, $p < .01$), and Islamic devotion ($r = -.27$, $p < .01$). Desire for revenge (DAQ) was positively correlated with depression ($r = .41$, $p < .01$).

Islamic devotion was negatively correlated with forgiveness of Iraqis in general (TRIM) ($r = -.27$, $p < .01$). However, Islamic devotion was not related

to interpersonal forgiveness (EFI) ($p > .25$), revenge (DAQ) ($p > .18$), psychological wellbeing environmental mastery ($p > .17$), psychological wellbeing self-acceptance ($p > .29$), or depression (BDI; $p > .90$).

Mediation Analysis

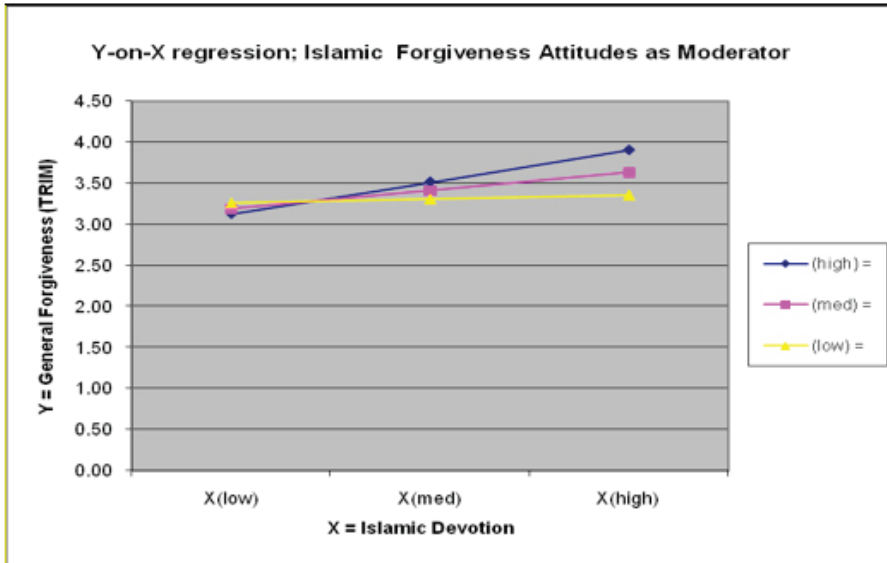
Regression analyses were conducted to test for mediation and such conditions were determined by using the model set forth by Baron and Kenny (1986). An analysis was conducted to determine if desire for revenge (DAQ) mediated the relationship between interpersonal forgiveness (EFI) and depression (BDI). An initial bivariate correlation analysis yielded significant relationships ($p < .05$) among the three variables. Next, revenge (DAQ) was regressed onto interpersonal forgiveness (EFI), according to step 1 of Baron and Kenny's model, yielding significant results ($\beta = -.34$, $t(155) = -4.49$, $p < .001$). The regression coefficient is also identical to the correlation coefficient reported in Table 1 indicating significance. Step 2 required that depression (BDI) be regressed onto interpersonal forgiveness (EFI), which yielded significant results including regression coefficients that are identical to the correlation coefficient reported in Table 1 ($\beta = -.15$, $t(154) = -1.90$, $p < .05$). Step 3 required that depression (BDI) be regressed onto revenge (DAQ) while controlling for interpersonal forgiveness (EFI). The results of the analysis were significant ($\beta = .44$, $t(152) = 5.65$, $p < .001$), suggesting that revenge mediates the relationship between interpersonal forgiveness and depression.

Moderation Analyses

To further understand the role of Islam and interpersonal forgiveness and forgiveness of Iraqis, moderation analyses were conducted. As previously mentioned, the scale was recoded into two distinct subscales of Islamic devotion and Islamic forgiveness attitudes. Two moderation analyses were conducted to determine if examining if Islamic forgiveness attitudes moderated the relationship between Islamic devotion and forgiveness of Iraqis in general (TRIM).

A hierarchical regression was conducted placing forgiveness of Iraqis in general (TRIM) as the dependent variable and the centered variables of Islamic devotion and Islamic forgiveness attitudes as the first and second independent variables. The third variable in the regression analysis was the Islamic devotion and Islamic forgiveness attitudes interaction term. The hierarchical regression analysis yielded significant results ($\beta = -.24$, $t(199) = -3.41$, $p < .001$). Coefficients from the final regression equation for Islamic devotion-centered, Islamic attitudes-centered, and the interaction variable (Islamic devotion x Islamic attitudes) and the standard deviation for Islamic devotion and TRIM were entered into a preformatted Excel spreadsheet (see Figure 1). The graph demonstrates

Figure 1: Note that the legend refers to high, medium, and low levels of Islamic forgiveness attitudes.



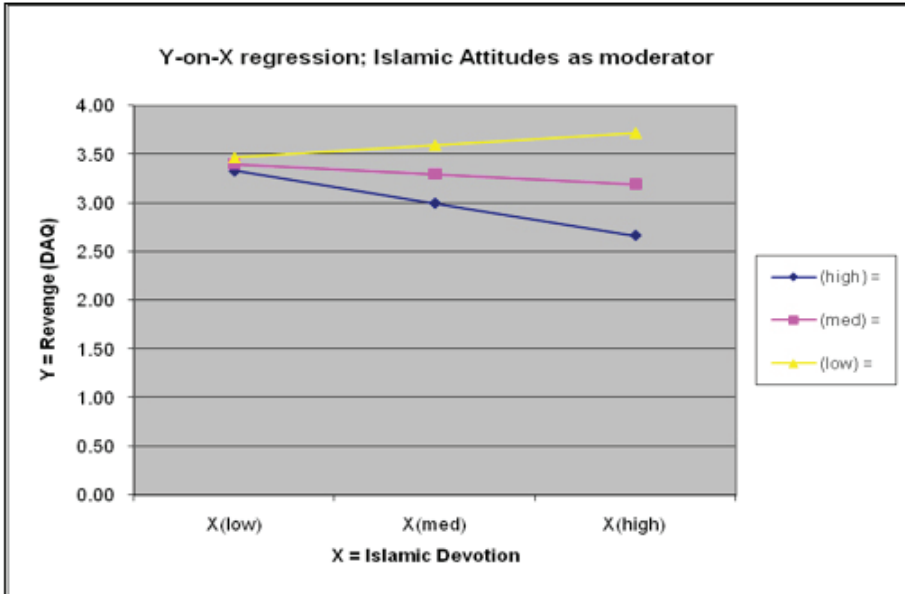
the regression of forgiveness of Iraqis in general (TRIM) on Islamic devotion at three different levels of Islamic forgiveness attitudes. Specifically, it suggests that Islamic forgiveness attitudes had a rather small moderating effect. However, forgiveness of Iraqis in general increased as scores of Islamic forgiveness attitudes increased.

A second moderation analysis was conducted examining if Islamic forgiveness attitudes moderated the relationship between Islamic devotion and the desire for revenge (DAQ). Similar to the previous analysis, revenge (DAQ) was entered as the criterion variable and Islamic devotion, Islamic forgiveness attitudes, and Islamic devotion x Islamic forgiveness attitudes interaction variable were then entered as predictor variables. The hierarchical regression analysis yielded significant results ($\beta = -.20, t(203) = -2.90, p < .05$), suggesting that Islamic forgiveness attitudes did in fact moderate the relationship between Islamic devotion and the desire for revenge. Figure 2 provides more specific information regarding the nature of the interaction. It suggests that Islamic forgiveness attitudes had a moderate interaction effect and as Islamic forgiveness attitudes increased, levels of revenge decreased.

Discussion

The purpose of this study was to examine forgiveness and the desire for revenge among 220 Kuwaiti, Muslim civilians who lived through the Iraqi invasion in 1990 and subsequent seven-month occupation. Participant levels of both in-

Figure 2: Note that the legend refers to high, medium, and low levels of Islamic forgiveness attitudes.



terpersonal forgiveness of people or groups they held responsible for their personal offense, forgiveness of Iraqis in general, revenge attitudes and Islam were correlated with mental health variables, including depression and psychological wellbeing. Interpersonal forgiveness, forgiveness of Iraqis in general, and Islam were examined for any moderating and mediating effects. Although forgiveness has been shown to be an effective resource in mitigating the effects of violence in international contexts, it had not yet been scientifically examined or formally implemented in the Middle East.

Discussion of Main Results

A number of demographic variables were correlated with levels of interpersonal forgiveness and forgiveness of Iraqis in general. For example, mean differences between gender interpersonal forgiveness were found with men tending to report higher levels of interpersonal forgiveness. This finding contradicts research conducted in the United States, which has tended to find that women are more likely to be forgiving (Worthington, Sandage, & Berry, 2000). However, since Kuwaiti women tended to have higher levels of anxiety and depression than men, even two years after Kuwait's liberation (Abdel-Khalek, 2004), perhaps they continue to have difficulty with forgiveness.

Religious denomination was also associated with interpersonal forgive-

ness, with Shi'as tending to be more forgiving than Sunnis. In fact, Shi'as tended to be more forgiving despite reporting higher levels of hurt from the invasion. Given the extensive Sunni-Shi'a conflict in Iraq, this finding is quite surprising. Some forgiveness researchers (e.g., Mullet & Azar, 2009) have discussed the importance of acknowledgement of the offense especially with Muslim populations. It may be that Saddam Hussein being deposed in 2003 and eventually executed and the dismantling of the Iraqi army (the two groups participants most commonly identified as being the source of their hurt), acted allowed Shi'a participants, in particular, to feel some sense of resolution and closure. However, additional research is needed to fully explain the finding.

Interpersonal forgiveness was found to be negatively correlated with both revenge and depression. This suggests that participants who tended to forgive those individuals or groups (e.g., Iraqi soldiers, Saddam Hussein, or God) whom they deemed responsible for their deep and unjust hurt, also reported lower levels of desire for revenge and depression. This was also found among those participants who tended to have higher levels of forgiveness of Iraqis in general in that as levels of forgiveness of Iraqis increased, levels of desire for revenge and depression decreased. However, neither interpersonal forgiveness nor forgiveness of Iraqis in general was related to levels of psychological well-being. This finding stands in direct contrast to a significant amount of literature that tends to find that forgiveness is related to high positive emotion and high satisfaction with life (Bono, McCullough, & Root, 2007). Because forgiveness at both the interpersonal and group levels were negatively associated with revenge and depression, yet were unrelated to psychological wellbeing suggests that forgiveness is an important factor negatively associated with deleterious effects of being victimized by war, yet was not associated with promoting aspects of psychological wellbeing.

Of all the variables studied, Islamic devotion was only negatively related to forgiveness of Iraqis in general. This suggests that as participants' scores on Islamic devotion increased, their tendency to be forgiving of Iraqis decreased. This finding is especially interesting as it directly parallels research conducted with religious groups (primarily Christians) in the United States, which tends to find a negative correlation between religious adherence and forgiveness attitudes (McCullough & Worthington, 1999; Hart & Shapiro, 2002; Greer, Berman, Varan, Bobrychi, & Watson, 2005; Tsang, McCullough, & Hoyt, 2005). Although religious doctrine and communities can mandate forgiveness, individuals vary in the way in which they observe such expectations (Girard & Mullet, 1997; Worthington, Sharp, Lerner, & Sharp, 2006). In fact, Worthington, Kurusu, McCullough, and Sandage (1996) have suggested that only those individuals who score higher than one standard deviation above the mean on religious variables tends to make meaning of the world through the lens of re-

ligion. Thus, although participants might have identified as being Muslim and though the Qur'an speaks to the importance of forgiveness, participants likely differ in the way in which Islam influences forgiveness attitudes.

Islamic devotion was not correlated with psychological wellbeing or depression, contradicting previous research. Pargament's religious coping theory (1990; 1996; 1997) suggests that religion helps people cope with adverse events by offering an explanation and helping people to make meaning of the events. In support of Pargament's model, research with Muslim/Middle Eastern participants -- including participants who were exposed to war trauma -- found that religiosity was related to lower levels of anxiety and depression, suggesting that Islam may act as a buffer to negative life events (Roshdieh, Templer, Cannon, & Canfield, 1999; Suhail & Akram, 2002; Baroun, 2006).

Hypothesis #1:

A mediation analysis examining whether desire for revenge mediated the relationship between interpersonal forgiveness and depression was found to be significant. This finding suggests that participant levels of interpersonal forgiveness led to reductions of desire for revenge, which in turn led to decreased levels of depression. This finding is supported by extant literature, which has generally found that forgiveness is strongly correlated to the reduction of revenge, depression, and anger (Temoshok & Chandra, 2000; Thoresen, Harris, & Luskin, 2000).

Hypotheses #2 and #3:

Two moderation analyses were conducted to better assess the role of Islamic devotion and Islamic forgiveness attitudes in interpersonal forgiveness, forgiveness of Iraqis, and revenge; both yielded positive results. The first analysis examining whether Islamic forgiveness attitudes moderated the relationship between Islamic devotion and forgiveness of Iraqis yielded significant results. This suggests that Islamic forgiveness attitudes had a somewhat small effect, and as Islamic forgiveness attitudes increased, forgiveness of Iraqis in general increased. A second moderation analysis examined if Islamic forgiveness attitudes moderated the relationship between Islamic devotion and revenge, and results suggest that Islamic forgiveness attitudes had a moderate interaction effect; as Islamic forgiveness attitudes increased, the desire for revenge decreased.

The moderation analyses suggest that Islamic devotional practices (e.g., prayer, consulting the Qur'an) alone did not lead to forgiveness of Iraqis. Rather, the belief that Islam encourages forgiveness is also important to the forgiveness process and the reduction of revenge traits. In other words, it appears that maintaining a devotional practice that is grounded in Islamic-based forgive-

ness beliefs may be the most critical formula to facilitate forgiveness of Iraqis and the reduction of revenge traits. This hypothesis is congruent with some literature on the relationship of religion and forgiveness attitudes (Worthington, Sharp, Lerner, and Sharp, 2006). Tsang, McCullough, and Hoyt (2005) suggest that the reason why evidence indicates that the more religious a person is, the less forgiving they tend to be is because of people's tendency to skew aspects of their religion to rationalize thoughts and behavior that would otherwise be seen as inconsistent with the values of the particular religion (e.g., Saddam Hussein justifying the religiously prohibited act of killing of other Muslims in the invasion of Kuwait, by saying that Kuwaitis were stealing oil from Iraq). In line with Tsang and colleagues' hypothesis, perhaps people who are able to view and practice Islam in a forgiving and compassionate way are able to be more forgiving of a general population of people after experiencing a significant trauma such as war.

Previous research with Muslim populations found that Muslims were more inclined to be forgiving when an apology was offered (Mullet & Azar, 2009). It is possible that the reason why participants generally remained highly unforgiving of Iraqis, even more than 20 years after the invasion, was because there was little contrition from Iraq and never any formal apology. The exception to this was the finding that forgiveness attitudes grounded in Islam (not just devotional practices) were related to decreased revenge. In this case, forgiveness becomes based more on Islamic forgiveness values rather than it being conditionally based on an apology. This finding would seem to capture the essence some researchers' (e.g., Enright and the Human Development Study Group, 1991) definition of forgiveness as an inherently moral act offered to the offender unconditionally and without the expectation of justice.

Limitations

Results of the study should be considered in the context of some caveats. For one, at the time of writing, the author was unaware of any existing measure of devotional and forgiveness attitudes related to Islam. As a result, a measure of Islamic devotional practices and forgiveness attitudes had to be created specifically for the study. Although the Islam measure yielded fair internal consistency, more psychometric testing to further validate the measure is warranted.

Second, although all of the variables used had been used in cross-cultural research (many have been validated with non-Western populations) and the relationships among the variables made intuitive sense (e.g., depression and psychological wellbeing were negatively correlated), the definitions and operationalizations of the variables are highly dependent on cultural values. Thus, it is important to consider how Middle Eastern cultural values may have influenced response patterns and interpretability of the findings.

A third limitation of the study is the fact that the sample was non-random. Although the sample is closely representative of the Kuwaiti populations, the sample was non-random in that participants were selected from specific organizations and through word-of-mouth. As a result, this process may have entered some selection bias into the sample. Consequently, the generalizability of the results is limited.

There are also some confounding variables that could also help explain the relationship between religiosity and forgiveness. For one, adherents of religion also tend to have more social support, which can yield higher levels of forgiveness. The fact that the invasion happened more than 20 years ago could have also influenced the relationship between religiosity and forgiveness.

Implications for Future Research and Practice

The results of this study have some important implications for future research and practice. Given that there is evidence to suggest that Islamic forgiveness attitudes moderates the relationship between Islamic devotional practices and forgiveness of Iraqis, further research investigating this relationship is warranted. In particular, research would do well to examine how forgiveness attitudes that are based on Islamic ideals are developed (e.g., whether such values transmitted by society, family, or personal readings of religious texts). Having such information could help lead to the development of culturally appropriate forgiveness interventions that are grounded in religious ideals that emphasize forgiveness.

The results of this study have a number of implications for future mental health practice. Given the evidence that interpersonal forgiveness among Middle Eastern Muslim survivors of war is related to lower rates of depression and that revenge traits are associated with lower levels of psychological wellbeing, clinical interventions with similar populations of people during times of peace that focus on facilitating interpersonal forgiveness may be helpful. Because there is some evidence to suggest that Islam is related to forgiveness of a broad population of people (e.g., Iraqis), such forgiveness interventions would likely be more effective if they were grounded in Islamic ideals of forgiveness.

Established clinical interventions (e.g., Enright, 2001) could be adjusted to incorporate multicultural issues including emphasizing aspects of Islam, the Qur'an, hadith, and jurisprudence. In so doing, Western forgiveness interventions could become more culturally congruent with Islamic values. Situating the intervention in the context of Islam would likely be more resonant with people who tend to view every aspect of life through the lens of Islam.

Unfortunately, war is a constant part of life for many across the global population. For this reason, it is critical that we continue to investigate the effects of war and how best to heal both physically and psychologically. Embedding forgiveness ideals in the context of religion may be one culturally congruent

way to cope with war trauma and, preferably, to help prevent it from occurring in the first place.

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Appendix: Beliefs Measure

For the following questions, please indicate your current thoughts and feelings about Islam. Use the following scale to indicate your agreement with each of the questions.

1 = Never 2 = Rarely 3 = A few times per month 4 = Several times per week
5 = Everyday

- 1 2 3 4 5 How often do you read the Qur'an?
- 1 2 3 4 5 How often do you observe the five daily prayers?
- 1 2 3 4 5 How often do you refer to religious teachings when making important decisions about your life?

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree
5 = Strongly Agree

- 1 2 3 4 5 When someone has hurt me I look to Islam to guide me about how I should respond.
- 1 2 3 4 5 I believe Islam encourages forgiveness.
- 1 2 3 4 5 I think Allah would understand if I sought retribution against someone who hurt me.
- 1 2 3 4 5 I believe that Islam permits retaliation in certain situations.
- 1 2 3 4 5 My religious community would understand if I retaliated against someone who hurt me.
- 1 2 3 4 5 I believe Islam encourages people not to seek retaliation.
- 1 2 3 4 5 My religious community is generally a forgiving group.
- 1 2 3 4 5 My religious community expects me to forgive others regardless of the offense.
- 1 2 3 4 5 Compared to others in my religious community, I tend to be more forgiving.
- 1 2 3 4 5 I consider myself a very religious person.