THE RELATIONSHIP BETWEEN QUEST RELIGIOUS ORIENTATION,
FORGIVENESS AND MENTAL HEALTH

Thesis
Submitted to
The College of Arts and Sciences of the
UNIVERSITY OF DAYTON

in Partial Fulfillment of the Requirements for
the Degree of
Master of Arts in Clinical Psychology

by
Berhane Messay
Dayton, Ohio
August, 2010
THE RELATIONSHIP BETWEEN QUEST RELIGIOUS ORIENTATION,
FORGIVENESS AND MENTAL HEALTH

APPROVED BY:

_________________________________
Lee Dixon, Ph.D.
Faculty Advisor

_________________________________
Susan Davis, Ph.D.
Faculty Reader

_________________________________
Melissa Layman-Guadalupe, Ph.D.
Faculty Reader

_________________________________
Jack Ling, Ph.D.
Faculty Reader

Concurrence:

_________________________________
Carolyn Roecker-Phelps, Ph.D.
Chair, Department of Psychology
ABSTRACT

THE RELATIONSHIP BETWEEN QUEST RELIGIOUS ORIENTATION, FORGIVENESS AND MENTAL HEALTH

Name: Messay, Berhane
University of Dayton

Advisor: Dr. Lee Dixon

Many religious traditions encourage forgiveness but little is known about how religious orientation, specifically Quest, characterized less by dogmatic doctrinal beliefs and more by belief in spiritual development as a journey that involves questioning and doubting, relates to forgiveness. In addition, research on the relationship between Quest and psychological distress has yielded conflicting findings. A possible reason for the inconsistent findings is that previous studies have conceptualized Quest as a unidimensional construct. The purpose of this study was to investigate how Quest and its recently recognized dimensions related to forgiveness and psychological distress. Participants (N=242) were recruited from introductory and upper-level classes at a medium-sized, Midwestern Catholic university. They completed measures of Quest (the Multidimensional Quest Orientation Scale and the Quest Scale), forgiveness (the Forgiveness Scale with additional questions regarding perceived tolerance of offender, and the Forgiveness Likelihood Scale) and psychological distress (the Depression Anxiety Stress Scale). Results suggested that certain dimensions of Quest were better predictors of forgiveness (e.g., Tentativeness, Exploration and Moralistic Interpretation)
and distress (e.g., Change, Religious Angst, and Existential Motives). More importantly, results revealed that same dimensions that were positively related to distress were negatively related to forgiveness. Further, the relationship between Quest and forgiveness appears to be moderated by the perceived tolerance/open-mindedness level of the offender.
## TABLE OF CONTENTS

ABSTRACT ............................................................................................................................................ ii

LIST OF FIGURES ........................................................................................................................... vii

LIST OF TABLES ............................................................................................................................... viii

INTRODUCTION ................................................................................................................................. 1

- Quest and the Interpersonal ........................................................................................................... 2
- Quest and the Intrapersonal ............................................................................................................ 4
- Quest and Forgiveness .................................................................................................................... 5
- Quest, Forgiveness, and Mental Health .......................................................................................... 7
- The Current Study ........................................................................................................................... 9

METHOD ............................................................................................................................................. 10

- Participants ................................................................................................................................. 10
- Scales and Measurements ............................................................................................................ 11
- Procedure ................................................................................................................................... 16

RESULTS .......................................................................................................................................... 17

DISCUSSION .................................................................................................................................... Error! Bookmark not defined.

- Implications .................................................................................................................................. 24
- Limitations and future directions .................................................................................................. 25

REFERENCES ................................................................................................................................. 30

APPENDICES .................................................................................................................................... 38

- A. Demographics/Background information .................................................................................... 39
- B. The Forgiveness Scale .............................................................................................................. 40
LIST OF FIGURES

1. Moderating Effect of Perceived World-View of the Offender on the Relationship between Quest and Overall Situational Forgiveness ......................49
LIST OF TABLES

1. Descriptive Statistics and Bivariate Correlations..........................................................44

2. Analyses of Effect of Demographic Variables on Major Study Variables.................45

3. Regression Analyses Using Interaction of
   Perceived World-view of the Offender and Overall Quest
   to Predict Overall Situational Forgiveness...................................................................46

4. Descriptive Statistics and Correlational Analyses
   between Dimensions of Quest and Forgiveness measures...........................................47

5. Correlational Analyses between Dimensions of Quest
   and Measures of Psychological Distress.......................................................................48
The Relationship between Quest Religious Orientation, Forgiveness, and Mental Health

The concept of religious orientation, first presented by Allport and Ross (1967), refers to the idea that individuals have a characteristic style of approaching and incorporating religious beliefs in their lives. Two religious orientations were initially identified. Individuals with an *intrinsic* approach view religion as central to their identity and the primary motivating factor in life. In contrast, individuals with an *extrinsic* religious orientation view religion as a means to acquire security, status, and similar external, self-serving gains. A third type of orientation, the *Quest* religious orientation (“Quest”), was introduced by Batson (1976). The ‘quest’ approach to religion is characterized less by dogmatic and doctrinal beliefs and more by a belief in spiritual development as a journey that involves questioning and doubting. More specifically, a questing orientation/world-view can be defined by three main characteristics: (a) “readiness to face existential questions without reducing their complexity,” (b) “self-criticism and perceptions of religious doubts,” and (c) “openness to change” (Batson & Schoenrade, 1991, p. 431).

Recent research has recognized Quest as a multi-dimensional construct with various motivations (Beck & Jessup, 2004). Motivational dimensions of Quest, that incorporate the original three characteristic of Quest, include Tentativeness (viewing questions and doubt as inevitable and positive), Change (openness to changing religious views and the ongoing examination of current religious beliefs), Ecumenism (acceptance of other religious views), Universality (acceptance of other religious views as equally
viable), Exploration (effort devoted to examining religious teachings), Moralistic Interpretation (focusing on the message behind biblical teachings rather than the literal understanding), Religious Angst (feelings of doubt and uncertainty about one’s religious beliefs), Complexity (understanding situations as more than black and white) and Existential Motives (the linking of religion to answering questions about the meaning and purpose of life; Beck & Jessup, 2004).

Studies have provided some insight into the effect of religious orientation (i.e., intrinsic/extrinsic) on forgiveness (Gordon et al., 2008) and the general relationship between religion and forgiveness (e.g., Fox & Thomas, 2008; Gorsuch & Hao, 1993; McCullough & Worthington, 1999). However, studies have not yet examined the relationship between Quest religious orientation and forgiveness, nor have they identified conclusively its effect on mental well-being (Salsman & Carlson, 2005). The Quest religious orientation, in particular, is likely to relate to forgiveness because it correlates with other socio-psychological constructs (both interpersonal and/or intrapersonal factors; discussed below) that are relevant to forgiveness.

**Quest and the Interpersonal**

Research has examined how Quest relates to constructs involved in interpersonal relationships. For instance, there is evidence that Quest predicts compassion. Typically, following a certain religious teaching over another cultivates an “us vs. them” attitude which can lead to showing compassion to those who hold similar values and withholding it from those who do not or who challenge those values (Batson, Eidelman, Higley & Russell, 2001). However, researchers have presented the Quest religious orientation as a source of universal compassion (Batson, Floyd, Meyer, & Winner, 1999; Batson,
Schoenrade, & Ventis, 1993; Batson et al., 2001). The compassion held by individuals with a questing approach to religion is illustrated by two main observations: (a) increased helping behavior toward others (Batson, 1976; Batson et al., 1999) even when social desirability is controlled for (Batson, 1976; Batson et al., 1993), and (b) anti-discriminatory/anti-prejudicial attitudes (Batson & Gray, 1981; Batson et al., 2001) regardless of type or extent of religious adherence (Batson, Naifeh, & Pate, 1978; McFarland, 1989; Jackson & Esses, 1997; Duck & Hunsberger, 1999). Accordingly, intolerance is often seen by researchers to be due to a lack of ecumenism and universality approach (Quest characteristics) to religion (Fulton, Maynard, & Gorsuch, 1999; Hunsberger, 1995; Kirkpatrick, 1993; McFarland, 1989), and due to certainty or minimal doubt of religious convictions (a non-Quest characteristic; Altemeyer & Hunsberger, 1992). In fact, studies have found that among the three types of religious orientation, only Quest predicted the willingness to be exposed to belief-opposing information (McFarland & Warren, 1992).

Interestingly, studies have found that the compassion felt by individuals with a Quest religious orientation (“questers”) may be contingent upon the perceived world-view of the individual in need of help. For example, Batson et al. (2001) found that questers displayed discrimination and were less willing to help an individual who made anti-gay remarks compared to an individual disclosing more tolerant attitudes, especially if the helping behavior promoted intolerance or closed-mindedness (Batson et al., 2008). Similarly, Goldfried and Miner (2002) found that questers may generally exhibit greater tolerance, but may be less tolerant when dealing with individuals who define themselves as fundamentalists and/or hold oppressive attitudes toward others.
Quest and the Intrapersonal

The findings that questers are more likely to engage in helping behavior and less likely to exhibit prejudice may be due to the fact that questers make complex attributions about others (Batson & Raynor-Prince, 1983; Sapp & Jones, 1986). For instance, individuals with a questing religious orientation use more nonconventional and complex moral reasoning and judgment (i.e., morality is not simply what is dictated by religious teaching; Sapp & Jones, 1986). Further, questers seem to exhibit more cognitive complexity, tentativeness, and openness in assessing various situations (Batson et al., 1993). The term cognitive complexity refers to, in this context, the capacity to incorporate different perspectives and create a more contextual understanding of a situation (Schroder, Driver, & Streufert, 1967). For example, studies have shown that regarding existential concerns, Quest was positively correlated with other complex cognitive factors, such as flexibility, openness, and integrative abilities (e.g., Batson & Raynor-Prince, 1983).

Additionally, research on cognitive motivation and religious orientation has indicated that Quest involves extensive motivational processes (Matby & Day, 2003). More specifically, it is related to a need for questioning/examining and an aspiration for internal consistency rather than simply following social/external standards of action (Barrett, Patock-Peckham, Hutchinson, & Nagoshi, 2005). On the other hand, the thought pattern of individuals with a rigid cognitive pattern, or a fundamentalist attitude, is driven by a need for structure as the basic cognitive-motivational force (Brown, Barnes, & Campbell, 2007). This ‘need for structure’ cognitive style is often accompanied by simplistic thinking, intolerance of ambiguity, and an increased likelihood of stereotyping.
others (Neuberg & Newsom, 1993)—all anti-questing factors that have been also been shown to be negatively related to forgiveness of others. Hence, Quest religious orientation may facilitate forgiveness of others.

**Quest and Forgiveness**

One of the tenants of all major religious traditions is the fact that forgiveness is encouraged (Sanderson & Linehan, 1999). Accordingly, research has shown that religiousness, in general, is related to forgiveness (Shoemaker & Bolt, 1997; Gorsuch & Hao, 1993). Further, depending on one’s religious orientation (Gordon et al., 2008), this may translate into a tendency to forgive, including the likelihood to forgive in the future (i.e., projective forgiveness; Fox & Thomas, 2008). However, anti-questing approaches to religion (i.e., simple and rigid thinking, intolerance and prejudicial/stereotypic attitudes) have repeatedly been shown as possible hindrances to granting forgiveness due to the increased tendency of classifying wrongdoers into simplistic and often negative categories (e.g., “if he/she did this, he/she is a bad person”; Brown et al., 2007). Further, some researchers have put forth the possibility that having a personal need for structure as a cognitive motivation and pairing it with intense religiousness could further impair the person’s ability to forgive and result in legitimizing the negative categories created by further demonizing the wrongdoer (e.g., “he/she is evil for doing this and should be punished [rather than forgiven]”; Brown et al., 2007). On the other hand, individuals that employ a more personal/internalized moral reasoning and have anti-fundamentalist religious attitudes (Quest characteristics), rather than follow religious/social pressure to forgive (i.e., more dogmatic or extrinsic approach to religiousness), may be more likely to forgive (Gordon et al., 2008; Brown et al., 2007; McCullough & Worthington, 1999;
Gorsuch & Hao, 1993). The increased reasoning and thought complexity that accompany the Quest religious orientation may result in individuals being more likely to look at offenses within their context and be more open to considering alternative explanations for an offender’s actions. In addition, personal qualities such as empathy (or empathic understanding) and agreeableness, that are also characteristic of questers, have been shown to foster forgiveness tendencies toward others (Koutsos, Wertheim, & Kornblum, 2008; Macaskill, Maltby, & Day, 2002; McCullough, Worthington, & Rachal, 1997).

Another reason that Quest may relate to forgiveness is that the two constructs relate to underlying personality constructs in the same way. A meta-analysis of the relationship between personality (a construct understood to be reflected in thinking patterns and behavioral tendencies, among other things) and religion has provided support for a positive association between Quest, Agreeableness, Conscientiousness and Openness, all of which are negatively related to religious fundamentalism or positively related to tolerance (Saroglou, 2002). These same personality dimensions have also been found to be related to forgiveness (Koutsos et al., 2008; Maltby, Day, & Barber, 2004; Walker & Gorsuch, 2002).

It is important to note that while Quest may be related to increased forgiveness, due to the general importance placed on open-mindedness and compassionate behavior by questers, they may be invariably intolerant toward violators of these dearly-held values, particularly, as mentioned, since they may exhibit limited compassion toward those who hold oppressive values (e.g., Golfried & Miner, 2002). Correspondingly, questers may be less likely to forgive individuals they perceive as intolerant. In other
words, the perceived tolerance level of an offender may moderate the relationship between Quest religious orientation and forgiveness.

**Quest, Forgiveness, and Mental Health**

The perpetual search for meaning in one’s life, spiritual/religious or otherwise, that is present in questers, has been posited to be a protective factor against anxiety and mental illness by theorists and researchers alike (e.g., Frankl, 1959; Van Dyke & Elias, 2007). Researchers have, thus, looked at the possible relationship between Quest orientation and healthy coping styles. For instance, Maltby and Day (2003) found that questing individuals tend to utilize more adaptive coping strategies (e.g., openly and cognitively appraising negative situations), while those who are rigid in their religious beliefs use more maladaptive coping strategies (e.g., viewing stressful events as “threat or loss”). In other words, individuals with a questing orientation are more likely to interpret negative events as an opportunity for growth (Pargament et al., 1992). As a result, a questing approach may be related to a reduction in psychological distress.

Furthermore, as discussed, questing characteristics, especially openness and more contextual processing of events, could translate into an increased tendency to forgive others, which has been shown to correlate negatively with levels of neuroticism (Walker & Gorsuch, 2002). Consequently, Quest could also have an additional positive implication for psychological health. Numerous studies have shown the benefit of forgiveness to overall well-being and in decreasing psychological distress symptoms such as depression (Van Dyke & Elias, 2007; Lawler et al., 2005; Orcutt, 2006; Maltby et al., 2004; Krause & Ellison, 2003; Toussaint, Williams, Musick, & Everson, 2001; Rye et al., 2001). A study by Lawler et al. (2005) found that the reduction in negative affect (e.g.,
feelings of tension, anger, fatigue, confusion, and depression) is an important mechanism by which forgiveness results in positive health outcome. Researchers have also identified the benefits of Forgiveness Therapy—a therapy that helps the wronged person analyze the transgressions, encourages forgiveness as an option and teaches clients the skills involved in forgiving—in decreasing depression, trait anxiety and likelihood for substance abuse (Reed & Enright, 2006; Lin et al., 2004). Therefore, whether it is due to a resulting adaptive coping style or due to the increased likelihood to forgive, having a questing approach to religion seems as though it would have a positive effect on mental health (i.e., lowering depression, anxiety, and stress).

However, some studies have provided contrary evidence and have hinted at the possibility that the association (between Quest and distress) is a matter of degree; that is, the higher the questing tendencies, the greater the increase in anxiety and general distress. For instance, Genia (1996) found that individuals who rated high on the Quest orientation scale reported more psychological distress. Studies have also shown that there is a certain religious conflict that may occur in individuals with a questing orientation (Nielsen & Futz, 1995), often due to the perpetual examination of existential concerns that is characteristic of the Quest religious orientation (Klaassen & McDonald, 2002; Batson et al., 1993; Batson & Raynor-Prince, 1983). Furthermore, a multivariate study by Henningsgaard and Arnau (2008) that examined religious orientation and personality factors found that individuals with high questing characteristics tend to score low on extraversion and experience high levels of neuroticism. On the other hand, individuals who scored low on Quest measures and scored high on extrinsicness (i.e., are more socially active) were found to rate low on Neuroticism factors (e.g., less prone to
anxiety). Still, some studies have failed to find any correlation between type of religious orientation and mental distress (e.g., Lewis, Maltby, & Day, 2005; Watson, Morris, & Hood, 1987).

A possible reason for the conflicting findings regarding Quest and mental health is that Quest is a complex, multi-dimensional construct, rather than the unidimensional construct that prior studies have presumed, and may not have a simple relationship with distress. A clear relationship between mental health and Quest may require developing a paradigm that takes into account the specific Quest dimensions involved. In other words, certain characteristics or dimensions of Quest may be positively related to distress while others will be negatively related or not have any relationship at all. This more complex relationship may explain some of the rather contradictory findings regarding Quest and psychological distress. Research is needed to examine this possibility.

The Current Study

Based on the research outlined above, the present study addressed four questions. First, “Is Quest religious orientation related to forgiveness of others?” It is hypothesized that Quest will be positively related to forgiveness. Second, “Is the relationship between Quest and forgiveness moderated by the perception of levels of openness/tolerance in the world-view of the offender?” It is hypothesized that the granting of forgiveness will vary depending on the perceived tolerance level of the wrongdoer. Specifically, wrongdoers with a perceived tolerant world-view will more likely be forgiven than those perceived as being closed-minded or having an intolerant world-view. Third, “Are certain dimensions of Quest better predictors of forgiveness than others?” It is hypothesized that the specific dimensions of Tentativeness, Change, Ecumenism, Universality, Moralistic Interpretation
and Complexity (dimensions that intuitively reflect openness and complexity in thought pattern) will be the strongest predictors of forgiveness of others. Fourth, “Is Quest related to psychological distress?” It is hypothesized that individuals who rate high on the same dimensions assumed to be involved in forgiveness will rate lower in measures of psychological distress such as depression, anxiety and stress. As a result, a negative or non-significant relation is expected between distress and the Quest dimensions of Tentativeness, Change, Ecumenism, Universality, Moralistic Interpretation and Complexity. On the other hand, it is hypothesized that participants who rate high on the dimensions of Exploration, Religious Angst and Existential Motives (dimensions that reflect extent of doubt, negative emotions, existential concerns and the effort dedicated to those matters) will rate higher on measures of psychological distress.

Method

Participants

Undergraduate and higher-level students (N=242) from a medium-sized Midwestern Catholic university were recruited for this study. The college-age group was considered ideal for this study since researchers have shown that questing characteristics are more likely expressed during adolescence and young adulthood (i.e., during formal identity formation years; e.g., Watson et al., 1988). The sample size was determined a priori using power analysis methods for multiple regression [N>50+8(19)] (Green, 1991). After removing outlier(s), participants ranged in age from 16 to 26 (M = 19.66, SD = 1.36). In terms of gender, women (61.80%) outnumbered men (38.20%). The percentages of men and women in our sample are similar to the constituency of students enrolled in psychology. The majority of participants were in their first (39.00%), second (32.40%),
and third (17.00%) year of college, but also included students in their fourth (9.10%), and those that were fifth year or higher (2.50%). The majority of participants were also Caucasians (92.50%) [followed by African American (3.70%), Asian or Pacific Islander (1.70%), Latino/a (1.70%), and other (.40%)] and identified themselves as Christians (88.80%). Other specified religious affiliations (Islam, Buddhism, and Hinduism) accounted for less than 2% of the sample, with the classification ‘other’ being chosen by 9.5% of the participants. After completing the study, participants received an experimental credit or extra-credit toward their class.

**Scales and Measurements**

Participants completed multiple self-report questionnaires including measures of demographic/background information, Quest religious orientation, forgiveness, and psychological distress. These measures are described below.

**Demographic/Background Information.** Participants completed a questionnaire requesting demographic information (see Appendix A for complete questionnaire).

**Measures of Quest Religious Orientation.** Participants completed two separate quest religious orientation measures:

**The Quest Scale.** The Quest Scale (Batson & Schroenrade, 1991b) was used to assess the overall Quest orientation of participants. The scale consists of 12 items that measure existential questioning (e.g. “my life experiences have led me to rethink my religious convictions”), doubting as positive (e.g., “It might be said that I value my religious doubts and uncertainties”), and openness to change (e.g., “As I grow and change, I expect my religion also to grow and change”) aspects of the Quest religious
orientation. The items use a Likert-type format, with responses ranging from 1 (strongly disagree) to 9 (strongly agree). The Quest Scale showed adequate reliability with Cronbach’s alphas of .75 and .81 in two separate samples (N=210 for first sample and N=214 for the second sample; Batson & Schoenrade, 1991b) and a reported test-retest reliability of .79 (Hill & Hood, 1999). This reliability was maintained with the current sample (Cronbach’s alpha of .77). Construct validity is also demonstrated by the significant correlations with previous measures of Quest (r = .85 to .95) and by the numerous studies that have found Quest to be a separate factor measure of religious orientation; correlations with the Extrinsic scale are typically in the .00 to .25 range, and correlations with the Intrinsic scale are typically in the -.10 to .10 range (Batson & Schoenrade, 1991a). Higher scores on this scale reflected a higher questing orientation.

**The Multi-Dimensional Quest Orientation Scale.** The Beck & Jessup (2004) Multi-Dimensional Quest Orientation Scale (MQOS) was used to assess the Quest religious orientation of participants. The MQOS consists of nine dimensions that are separately assessed. They include: Tentativeness, Change, Ecumenism, Universality, Exploration, Moralistic Interpretation, Religious Angst, Complexity and Existential Motives. Each item is rated on a Likert-type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The MQOS subscales were found to be adequately homogenous (Cronbach’s alpha coefficients range from .68 for Complexity to .90 for Ecumenism). Similarly, in the present sample, the homogeneity of subscales was further supported with Cronbach’s alpha coefficients with the following values: Tentativeness (.73), Change (.86), Ecumenism (.82), Universality (.86), Exploration (.91), Moralistic Interpretation (.87), Religious Angst (.89), Complexity (.72), and Existential Motives (.88). In
addition, factor analysis has shown the distinctiveness of each dimension, with the subscales sharing “only 2%” of their variance (Beck & Jessup, 2004, p. 286). The MQOS subscales were also significantly and positively correlated ($r$ values ranging from $0.18$ to $0.51$, $p<0.05$) with other measures of Quest (e.g., Batson’s Interactional/Quest Scale) with the exception of the Moralistic Interpretation subscale, which was marginally significant ($p=0.06$). Using our current sample, all subscales (including moralistic interpretation) were found to be significantly and positively related at/or below the .01 level to the Quest Scale. Therefore, higher scores on each subscale reflected higher presence of questing characteristics.

**Measures of Forgiveness.** Participants completed two separate forgiveness measures:

**The Forgiveness Scale.** The Forgiveness Scale (Rye et al., 2001) was used to measure forgiveness of a betrayal that the participant has experienced. In addition to providing a brief description of the offense, participants were instructed to think about how they have responded to this betrayal and indicate the extent to which they agree on 15 Likert-type items ranging from 1 (strongly disagree) to 5 (strongly agree). The Forgiveness Scale is comprised of two separate subscales: Presence of Positive (five items; e.g., “If I encountered the person who wronged me I would feel at peace”) and Absence of Negative factors (10 items; e.g., “I think that many of the emotional wounds related to this person’s wrongful actions have healed”). Both subscales were found to be adequately reliable (Absence of Negative: Cronbach’s alpha coefficient=.86, test-retest=.76; Presence of Positive: Cronbach’s alpha coefficient=.85, test-retest=.76; overall scale: Cronbach’s alpha coefficient=.87, test-retest=.80). The reliability of the
overall scale was further supported with the current sample (overall scale: Cronbach’s alpha of .89; for both subscales: Cronbach’s alpha value above .82). The scale also demonstrated adequate construct validity. The subscales were significantly correlated with other measures of forgiveness such as the Enright Forgiveness Inventory (Absence of Negative, \( r = .52, p < .001 \); Presence of Positive, \( r = .75, p < .001 \)). The Forgiveness Scale also correlated significantly and in the expected directions with measures of related constructs such as anger, hope, and spiritual well-being. Higher scores on each subscale indicated higher levels of forgiveness.

**The Forgiveness Likelihood Scale.** The Forgiveness Likelihood Scale (Rye et al., 2001) was used to determine the general tendency or willingness to forgive an offender across different situations. The scale consists of 10 items that describe hypothetical wrongdoings (e.g., your significant other has a “one night stand” and becomes sexually involved with someone else. What is the likelihood that you would choose to forgive your significant other?). The items use a Likert-type format, with responses ranging from 1 (not at all likely) to 5 (extremely likely). The scale’s items load on one factor and show adequate reliability (Cronbach’s alpha coefficient= .85; test-retest= .81). The reliability of this scale was further demonstrated using the present sample (Cronbach’s alpha value of .84). Construct validity is also demonstrated by the significant correlations with other measures and related constructs. This scale is significantly correlated with the Enright Forgiveness Inventory \( r = .25, p<.001 \), and with global forgiveness item from the Enright Forgiveness Inventory \( r = .23, p<.001 \). The scale is also correlated with measures of trait anger, religious well-being, and social desirability in the expected directions (Rye et al., 2001). Higher scores revealed an increased willingness to forgive.
Measure of Psychological Distress. The Lovibond and Lovibond (1995) Depression Anxiety and Stress scale (DASS) was used to measure the overall trait psychological distress of participants. This scale consists of 42 Likert-type items, with response possibilities ranging from 0 (does not apply to me at all) to 3 (applies to me very much, or most of the time). There are three separate subscales in this measure. The Depression subscale measures presence of general hopelessness, lack of involvement or interest, devaluation of life, and self-criticism (e.g., I feel that I have nothing to look forward to). The Anxiety subscale assesses general anxious affect, ease of autonomic arousal, situational anxiety, and general skeletal muscle effects (e.g., I find myself in situations that make me so anxious I am most relieved when they end). Lastly, the Stress subscale examines the extent of chronic but non-specific arousal such as difficulty relaxing, being easily upset/agitated, and general irritability and impatience (e.g., I find myself getting upset rather easily). The DASS has been found to be a reliable measure using nonclinical (e.g., Ahmet & Bayram, 2007; Lovibond & Lovibond, 1995) and clinical samples (e.g., Bown & Chorpita, 1997). Cronbach’s alpha was also found to be acceptable for each of the subscales using the nonclinical sample (depression = .96, anxiety = .89, stress = .93, entire measure = .96). Current sample also yielded Cronbach’s alpha coefficient values that reflected adequate reliability (depression = .90, anxiety = .79, stress = .89, entire measure = .94). The Depression subscale on the DASS was strongly correlated with the Beck Depression Inventory \((r = .75, p < .05)\), and the Anxiety subscale was also highly correlated \((r = .83, p < .05)\) with the Beck Anxiety Inventory (Brown & Chorpita, 1997). Scores on each of the three subscales range from 0 to 42 with higher scores and indicated higher levels of depression, anxiety, and stress.
**Measure of Perceived World-View of the offender.** This scale was developed for the purposes of this study. Participants were presented with two preliminary questions/items (Questions 5 and 6) that were added to the Forgiveness Scale (see Rye et al., 2001; Appendix B for modified Forgiveness Scale) to assess the perceived tolerance/open-mindedness level of the offender. The items used a Likert-type format, with responses ranging from: for perceived tolerance of other people’s values and opinion, 1 (*Very tolerant*) to 4 (*Not at all tolerant*); and, for general perceived open-mindedness 1 (*Very open-minded*) to 4 (*Not at all open-minded*). Cronbach’s alpha for this scale was .76, which reflected adequate internal consistency. In addition, for the purpose of analysis, a variable was created ("PerceiveTolOpen") that evaluated the overall perceived level of openness/tolerance of a specific offender’s world-view. The value of the variable was determined by averaging the ratings provided on the two questions assessing perceived tolerance and perceived open-mindedness of an offender.

**Procedure**

The self-report measures/questionnaires were administered to groups of no more than forty participants. Consent was obtained prior to the administration of questionnaires. Further, questionnaires were presented in a randomized manner using Latin Square method. To ensure confidentiality, the responses of each participant were identified with a research code (i.e., Subject ID number) and therefore, aside from the informed consent form which was stored separately, participants were instructed not to put their names on any of the self-report questionnaires. After completing the study, participants were debriefed and awarded credit toward their class for their participation.
Results

Prior to the analyses of major study questions, the following analyses were performed using SPSS/PASW Statistics Release 18:

(1) Basic descriptive statistics (i.e., mean and standard deviation) were computed to describe the general central tendency and variability of the sample.

(2) Basic correlations between major study variables were computed to reveal overall trends (presented in Table 1). Our results seem to confirm the previous findings (e.g., Rye et al., 2001) that there is a significant negative association between forgiveness (both situational and dispositional) and measures of psychological distress. Also, supporting some researchers’ (e.g., Genia, 1996) findings is the positive association between Quest and psychological distress, particularly depression and stress measures. However, it is important to note that this result is from looking at Quest as a unidimensional construct (i.e., using the Quest Scale).

(3) Correlations were computed to determine the relationship between continuous demographic variable(s) (i.e., age) and measures of Quest (i.e., Quest scale and MQOS), forgiveness (i.e, Forgiveness Scale and Forgiveness Likelihood Scale), and psychological distress (i.e., DASS). T-test and one-way ANOVA were used to compare the means of the measures of Quest orientation, forgiveness, and psychological distress (i.e., study variables) for the Gender and ‘Year in School’ demographic categorical variables (i.e., to see if there is a significant difference in means between levels of the demographic variables for each of the study measures). However, because of lack of variability in our sample, the effect of race (approximately 93% of our sample were Caucasian) and religious affiliations (approximately 90% of our sample identified
themselves as Christians) on our study variables were not tested. Our results (displayed in Table 2) indicated that none of the demographic variables were found to be significantly related to our main study variables. As a result, there was no need to control for any demographic variables in the subsequent analyses of the research questions.

*Overall Quest and Forgiveness (Hypothesis 1)*

Correlations were computed to determine the relationship between Quest (using the Quest Scale) and the forgiveness measures (overall situational forgiveness, absence of negative, presence of positive, and dispositional forgiveness). Our results (also included in Table 1) did not find a significant association between overall Quest (“QSTotal”) and the measures of forgiveness (“O SF” = Overall Situational Forgiveness; “Pos.” = presence of positive factor; “Neg.” = Absence of negative factor; “DF” = Dispositional Forgiveness).

*World-view of the offender as a moderating variable in the relationship between Quest and Forgiveness (Hypothesis 2)*

Simultaneous regressions were computed to test the significance of the interaction between Quest and Perceived World-View of the offender on overall forgiveness (the dependent variable). To avoid multicollinearity among the main effects and the product term, PerceiveTolOpen (the newly created variable) and Quest (using the Quest Scale) were centered prior to forming the product term and prior to entering them into the equation (Cohen, Cohen, West, & Aiken, 2003). The unique contribution (i.e., controlling for all main effects) of the interaction variable determined the significance of the interaction or moderation. Results suggested the presence of a significant interaction, $F(1, 238) = 4.28, p = .040, \beta = .13$, between Quest and perceived tolerant/open-minded
world-view of the offender on overall forgiveness (see Table 3 for elements of the analysis). Effect size for the interaction, using Cohen’s $f^2$, was .18, and according to Cohen (1988), this value reflects a medium effect. Since a significant interaction was found, it was statistically decomposed, according to the Cohen et al. (2003) method, to determine more specifically the effect of Quest on forgiveness at different levels of perceived tolerance/open-mindedness. That is, the interaction was decomposed for high and low perceived tolerance/open-mindedness (i.e., one standard deviation above and below the mean level of perceived world-view of the offender). As hypothesized, for high level of perceived tolerance/open-mindedness, the relationship between Quest and forgiveness was found to be non-significant, $F(1, 238) = 1.00, p = .317, \beta = .087$.

Similarly, at one standard deviation, the $F$-value for low level of perceived tolerance and open-mindedness was trending toward significance, $F(1, 238) = 3.34, p = .069, \beta = -.142$. As a result, two standard deviations above and below the mean was used to decompose the interaction. Final analysis revealed that the relationship between Quest and forgiveness is a negative and significant one at low levels of perceived tolerance of the offender, $F(1, 238) = 4.541, p = .034, \beta = -.257$. On the other hand, there was no significant relationship between Quest and forgiveness when the offender was perceived as being highly tolerant, $F(1, 238) = 2.330, p = .128, \beta = .201$ (for illustration of the interaction between Quest and perceived tolerant/open-mindedness level of the offender on overall forgiveness toward a specific offender see Figure 1). In other words, Hypothesis 2 was supported by the above results—the perceived world-view of the offender significantly moderates the relationship between Quest and overall situational forgiveness.
Dimensions of Quest and Forgiveness (Hypothesis 3)

To determine the relationship between each dimensions of Quest and Forgiveness, correlations were computed between the dimensions (using the MQOS) and the different measures of forgiveness (i.e., overall dispositional, overall situational forgiveness, Presence of Positive, and Absence of Negative factors). Descriptive statistics ($M$ and $SD$) were also performed for each of the nine dimensions of Quest. It was hypothesized that the specific dimensions of Tentativeness, Change, Ecumenism, Universality, Moralistic Interpretation and Complexity (those that reflect complex thinking patterns, open-mindedness, etc.) would be positively correlated with forgiveness measures. On the other hand, dimensions of Exploration, Religious Angst and Existential Motives (those that reflect effort expended, distress, etc.) were expected to have a negative or non-significant correlation with forgiveness. Our results, displayed in Table 4, partially supported our hypothesis. The dimensions of Tentativeness and Moralistic Interpretation were found to be significantly related, and in the direction that was expected (i.e., positively), with at least one measure of forgiveness. Also, the dimensions of Religious Angst and Existential Motives were found to be significantly related, and in the hypothesized direction (i.e., negatively), with all the measures of forgiveness. However, there were also some surprising findings. The dimensions of Change and Exploration were significantly related to most of the forgiveness measures, but in the opposite direction of what was expected (Change was negatively related, whereas Exploration was positively related). Further, the dimensions of Ecumenism related negatively to dispositional forgiveness. The dimensions of Universality and Complexity were found not to be significantly related to measures of forgiveness.
Dimensions of Quest and Psychological Distress (Hypothesis 4)

To examine the relationship between Quest and psychological distress, correlations were computed between each dimension of Quest (using the MQOS) and psychological distress measures of depression, anxiety and stress (using the DASS). It was hypothesized that the same dimensions that would be positively related to forgiveness measures (Tentativeness, Change, Ecumenism, Universality, Moralistic Interpretation and Complexity) would be negatively or non-significantly related to psychological distress measures. On the other hand, those that were expected to be negatively related to forgiveness (Exploration, Religious Angst and Existential Motives) would have a positive relationship with psychological distress. Findings, presented in Table 5, supported, for the most part, our hypothesis. As discussed in the previous section, the dimensions of Change and Exploration related to forgiveness but not in the direction that was originally assumed. However, the dimension Change related to distress measures in the direction that corresponds with it being negatively associated with forgiveness. In other words, it was significantly and positively related to most of the distress measures. Likewise, Exploration was found to be positively related to forgiveness, and results showed it was actually not related to any measures of distress. In addition, the dimensions of Religious Angst and Existential Motives were found, as hypothesized, to be significantly and positively correlated with all the distress measures. One unexpected finding is the positive association between the dimension of Complexity and most of the distress measures, particularly since it was initially hypothesized that it would relate positively to forgiveness and negatively (or non-significantly) to distress.
Discussion

The purpose of this study was two-fold. First, the study examined the relationship among Quest, its dimensions, and forgiveness, including the possibility that the perceived tolerance/open-mindedness of the offender would moderate the relationship between Quest and forgiveness. Second, the study also attempted to provide clarification of past conflicting findings about the association between Quest and psychological distress by looking at the specific dimensions of Quest involved. As far as we know, neither topic has been investigated by researchers.

The most significant finding of the study is that the relationships between Quest, forgiveness, and psychological distress, do, indeed, depend on the specific dimensions of Quest, and in regards to forgiveness, it also involves the perceived world-view of the offender. More specifically, while our finding of overall Quest not being related to forgiveness seemed to partially contradict our first hypothesis, it also further highlights our basic assumption—the relationship is contingent upon which specific dimensions of Quest contribute to the questing nature of the person. The importance of the separate dimensions in understanding the relationship among Quest, forgiveness, and psychological distress was further highlighted by our results testing the third and fourth hypotheses. For instance, while some of the dimensions (Change, Exploration, and Complexity) related to forgiveness and distress in the opposite direction from what was expected, the same dimensions that were significantly and negatively related to forgiveness were positively related to distress. On the other hand, those that unexpectedly, but positively, related to forgiveness did not have a significant association with distress, thus confirming our underlying theory (i.e., dimensions that positively
relate to forgiveness would negatively or non-significantly relate to distress, whereas dimensions that negatively relate to forgiveness would positively relate to distress). In other words, it seems that if a person rates higher on dimensions that assess both extent of doubt and examination of religious convictions (Change and also Complexity) as well as the experience of angst (Religious Angst), the more likely the person will experience psychological distress, and be less likely to forgive others. On the other hand, the more a person focuses on the main messages of religious teachings (Moralistic Interpretation) and willingly puts effort into examining religious teachings (Exploration), the more likely the person will not experience distress and actually be more likely to forgive others. Looking at the pattern of our findings, it seems the tendency to question and examine that is often present in questers also translates to understanding wrongdoings committed by others. In conclusion, even though our initial model (about which dimensions would relate to forgiveness and distress measures) and the basic premise of our hypotheses were mostly confirmed, our unexpected results regarding certain dimensions (Change, Exploration, and Complexity) of Quest seem to dictate a minor adjustment to our original model. In other words, the specific dimensions of Tentativeness, Exploration, and Moralistic Interpretation, appear to be better predictors of ability to forgive, whereas the dimensions of Change, Religious Angst and Existential Motives, actually seem to predict hindrance in one’s ability to forgive. Consequently, the dimensions of Change, Religious Angst, Existential Motives, and Complexity, were also found to predict the presence of psychological distress.

Another noteworthy finding of the study is the significant moderating effect of the perceived worldview of an offender in the relationship between forgiveness and Quest. In
other words, the higher the presence of questing characteristics, the greater the effect of perceived tolerance/open-mindedness of an offender seems to have on forgiveness. This finding seems to reiterate that questers, in general, do tend to place great importance on open-mindedness and tolerance, in some cases, to the point of withholding forgiveness to those who they perceive to not hold those values. Another way to put this is that while questers generally tend to have an ability to incorporate context into understanding situations, this seem to be limited to individuals who are similar to them in terms of their world-view and value system. Therefore, it seems that previous findings (e.g., Godfried & Miner, 2002; Batson et al., 2001) that questers are not universally compassionate is also reflected in a similar manner in their tendency to forgive. Individuals with a questing nature tend to be less tolerant, thus less forgiving, when dealing with individuals with a close-minded world-view.

**Implications**

Because this study examines the relationship between how individuals approach religion and the presence of psychological distress, it has clinical implications. More specifically, our findings (looking at the specific dimensions of Quest) seem to suggest that the experience of psychological distress may not simply be due to the extent of questioning of religious belief or putting effort into understanding things (as evidenced by the negative association between distress and Exploration). Rather, it may be a matter of placing too much importance on religious confirmation in one’s search for purpose (as evidenced by the strong positive association between distress and the dimension Existential Motives). Also, as intuition would dictate, the occurrence of doubt/questioning of one’s religious convictions appears to be correlated with one’s
tendency to experience negative emotions (as evidenced by the strong positive association between distress and Religious Angst). Further, seeing the simplicity of the religious teachings and only focusing on the messages of the religious teachings (rather than their historical accuracy) seems to be associated with not only an increased ability to forgive (evidenced by a strong positive association between Moralistic Interpretation and forgiveness measures) but also a decrease in one’s chances of experiencing distress. This explanation seems to actually provide a logical justification for the unexpected positive association between distress and the dimension of Complexity. This idea that forgiveness is positively related to spiritual well-being (i.e., lack of negative emotions due to one’s spiritual and/or religious beliefs) or general healthy attitudes is not entirely new (e.g., Toussaint et al., 2001; Lawler-Row & Piferi, 2006). However, what our study suggests is that spiritual well-being could be further examined in terms of Quest dimensions that increase one’s psychological health and those that negatively affect one’s well-being, including hindering one’s ability to forgive. In other words, for counseling and therapy purposes in treating religious or psychological distress, it may be essential to encourage looking at the underlying messages (rather than focusing on details that are highly contextual to the historical times). Also, encouraging the viewpoint that religious doubts and efforts put into examining religious teachings is an inevitable and positive part of the journey of life may be beneficial as well.

**Limitations and future directions**

One of the most important limitations of this study is the lack of diversity in our sample. Our sample was mostly Caucasian and identified themselves as Christian Catholics. While this homogeneity in our sample, in terms of religious affiliation,
allowed us to use the MQOS scale, the limitations that were pertinent to Beck and Jessup’s (2004) study (e.g., two of the subscale use wording that are mostly applicable to Christian orientated individuals and their sample also consisted of individuals who identified themselves as Christians) also carry over to the current study. Also, the numbers of female and male participants were disproportionate (approximately 2 to 1). This lack of diversity and equal representation of gender in our sample does limit our ability to generalize our findings across all types of people. Also limiting our ability to generalize is the age of our participants and the fact that they are all college students. While the participants’ age corresponds to formative years that foster development of questing characteristics (e.g., Watson et al., 1988), the young age of our participants brings forth issues that need to be addressed. First, the way younger individuals approach forgiveness has been shown to be different than older individuals. That is, older adults, either due to developmental or cohort differences, tend to be much more able (compared with younger populations) to adjust their emotional reactions to interpersonal offenses and, as a result, forgiveness is often not seen as an emotionally-tasking goal to undertake (e.g., Romero & Mitchell, 2008). In other words, it seems older individuals find it easier to forgive others. Accordingly, numerous studies have shown that age is positively related with forgiveness (e.g., Cheng & Yim, 2008). One important study by Girard and Mullet (1997) proposed that there is an inherent difference on how older individuals forgive compared to younger individuals. Older people were likely to forgive regardless of whether they have a close relationship with the person or not and whether the person apologized or not. In other words, older people tend to be more universally forgiving. As a result, the tolerant/open-mindedness world-view of the offender may not be a
significant moderator for older questing populations in their ability to forgive an offender. Second, while our study focused mainly on the perception of participants regarding the tolerance/open-mindedness level of an individual that has offended them, the level of tolerance and open-mindedness of the participants themselves may be different depending on their age. This difference may affect their ratings of tolerance/open-mindedness levels of others, including individuals who have offended them. For instance, survey studies have shown that older individuals tend to be less tolerant of homosexuality and generally tend to harbor more socially conservative attitudes (e.g., Anderson & Fetner, 2008). As a result, they may not classify someone with a similar tolerance/open-mindedness level as closed-minded. Furthermore, as briefly mentioned, there seem to be some fundamental differences due to age that may even reduce the likelihood that older individuals have questing characteristics. For instance, a recent study by Bailey and Henry (2008) found that there is a reduction in cognitive empathy (or empathic understanding) with age. Some studies have also shown that there seem to be changes in personality that happen due to growing older. Some of the personality traits that appear to change are the same ones that seem to be related to Quest. For instance, using the Big Five model, Donnellan and Lucas (2008), found that Openness was negatively related to age, whereas Agreeableness seems to increase with age. Therefore, one possibility for future research regarding this topic could be expanding the applicability of our findings by using participants with different demographic characteristics, particularly age and religious affiliation.

In addition, this study focused exclusively on forgiveness of others to investigate the relationship among Quest, forgiveness, and distress. Our findings may be different if
forgiveness of oneself was used as the forgiveness criterion. Numerous studies have resulted in the recognition that there are different factors that are involved in self-forgiveness that are not in forgiveness of others, at least not in the same level or direction. Some of these factors include proneness to feeling guilty, self-esteem, and the personality factors of narcissism and agreeableness (e.g., Strelan, 2007). A study by Macaskill et al. (2002) further highlighted the distinction between the two types of forgiveness by finding that while individuals with higher levels of empathy (a Quest characteristic) have greater tendency to forgive others, they have a lesser tendency to forgive themselves. In other words, there may be a negative association between Quest and self-forgiveness. Therefore, another possibility for future research could be to see if the trends in our results would be similar looking at forgiveness of oneself as a variable.

Furthermore, this study relied solely on self-report measures to examine variables. As a result, there may be an effect of common method variance on the observed relationships between study variables. A third possibility for future studies would be to use multiple-methods to measure variables (e.g., using observed behavior to assess the extent of forgiveness toward an offender).

However, despite these limitations, our findings make significant contributions to the literature by highlighting the importance of taking into account in future research (a) the separate dimensions of Quest, and (b) the perceived world-view (in terms of tolerance and open-mindedness) of others when examining any relationships that involve Quest religious orientation. Further, by shedding light on the dimensions that may negatively impact the spiritual and general well-being of individuals, this study also suggests ways to help individuals that are experiencing distress due to their religious beliefs. In other
words, the findings of this study contribute to both research and applied psychology fields.
References


APPENDIX A
Demographics/Background information

Please complete the following questionnaire. When appropriate, place a check next to or circle your response. All of your responses will remain confidential. Please do not place your name on this questionnaire.

1. Age: _______

2. Gender: Male (1) Female (2)

3. Year in school: 1 2 3 4 Other (please specify): _________ (5)

4. Race: Caucasian (1) Asian or Pacific Islander (2)
    African American (3) Latina/o (4) American Indian (5)
    Other (Specify) (6)

5. Which major world religion do you currently identify with?
    Christianity (1) Islam (2) Judaism (3) Buddhism (4) Hinduism (5)
    Other (Specify) (6)

If applicable, specify denomination (e.g. Catholic, Methodist, Baptist, ...): __________________________

6. Where do you, in general, place yourself in the conservative/liberal political continuum?

    1 2 3 4 5 6 7
    Very Liberal Neutral Very Conservative
APPENDIX B
The Forgiveness Scale

1. Think about someone who has wronged or mistreated you in the past. If you have been wronged or mistreated by more than one person, select a person whose actions were very hurtful. Please briefly describe how you were wronged or mistreated by this person.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. How long ago did the wrongdoing(s) by this person occur? (For example, if the event occurred 2 and a half years ago, write a 2 next to the number of years, and a 6 next to number of months. If the event occurred 8 months ago, simply write 8 next to number of months.)

Number of years ___________ Number of months ___________

3. From a scale of 1 to 10, please indicate in the space provided below, how hurt do you feel NOW as a result of this person’s wrongful actions? (1=not hurt at all; 10=extremely hurt or the most hurt you have ever felt)

___________

4. In your opinion, how severe (in terms of being able to forgive), was the wrongdoing that was committed against you? Please circle the appropriate response.

Very severe (1)  Moderately Severe (2)  A Little Severe (3)  Not severe at all (4)

5. Using the scale below, how tolerant of others’ values and beliefs do you feel the person is who wronged or mistreated you? Please circle the appropriate response.

Very tolerant (1)  Moderately tolerant (2)  A little tolerant (3)  Not at all tolerant (4)
6. How open-minded do you feel the person is who wronged or mistreated you? Please circle the appropriate response.

<table>
<thead>
<tr>
<th>Very open-minded (1)</th>
<th>Moderately open-minded (2)</th>
<th>A Little open-minded (3)</th>
<th>Not at all open-minded (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Directions:** Think of how you responded to the person who has wronged or mistreated you. Indicate the degree to which you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can’t stop thinking about how I was wronged by this person.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. I wish for good things to happen to the person who wronged me.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. I spend time thinking about ways to get back at the person who wronged me.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. I feel resentful toward the person who wronged me.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. I avoid certain people and/or places because they remind me of the person who wronged me.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. I pray for the person who wronged me.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. If I encountered the person who wronged me I would feel at peace.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8. This person’s wrongly actions have kept me from enjoying life.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9. I have been able to let go of my anger toward the person who wronged me.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10. I become depressed when I think about how I was mistreated by this person.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
11. I think that many of the emotional wounds related to this person’s wrongful actions have healed.

12. I feel hatred whenever I think about the person who wronged me.

13. I have compassion for the person who wronged me.

14. I think my life is ruined because of this person’s wrongful actions.

15. I hope the person who wronged me is treated fairly by others in the future.

Reverse Code: 1,3,4,5,8,10,12,14
Absence of Negative subscale items: 1,3,4,5,8,9,10,11,12,14
Presence of Positive subscale items: 2,6,7,13,15
Table 1

*Descriptive Statistics and Bivariate Correlations*

<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>
<th>9</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. OQ</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>58.16</td>
<td>15.08</td>
</tr>
<tr>
<td>2. O SF</td>
<td>-.08</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>55.34</td>
<td>10.71</td>
</tr>
<tr>
<td>3. Pos.</td>
<td>-.09</td>
<td>.78**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>16.57</td>
<td>4.87</td>
</tr>
<tr>
<td>4. Neg.</td>
<td>-.06</td>
<td>.91**</td>
<td>.46**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>38.77</td>
<td>7.56</td>
</tr>
<tr>
<td>5. DF</td>
<td>-.02</td>
<td>.33**</td>
<td>.40**</td>
<td>.21**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>27.67</td>
<td>6.86</td>
</tr>
<tr>
<td>6. PD</td>
<td>.15*</td>
<td>-.32**</td>
<td>-.18**</td>
<td>-.34**</td>
<td>-.25**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>22.80</td>
<td>15.57</td>
</tr>
<tr>
<td>7. D</td>
<td>.15*</td>
<td>-.30**</td>
<td>-.14*</td>
<td>-.33**</td>
<td>-.14*</td>
<td>.80**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>4.27</td>
<td>5.17</td>
</tr>
<tr>
<td>8. A</td>
<td>.07</td>
<td>-.24**</td>
<td>-.15*</td>
<td>-.25**</td>
<td>-.21**</td>
<td>.89**</td>
<td>.60**</td>
<td>--</td>
<td>--</td>
<td>7.19</td>
<td>5.31</td>
</tr>
<tr>
<td>9. S</td>
<td>.16*</td>
<td>-.29**</td>
<td>-.17**</td>
<td>-.31**</td>
<td>-.27**</td>
<td>.91**</td>
<td>.57**</td>
<td>.74**</td>
<td>--</td>
<td>11.33</td>
<td>7.36</td>
</tr>
</tbody>
</table>

*Note.* OQ = Overall Quest (as measured by the Quest Scale). O SF. = Overall Situational Forgiveness, forgiveness toward a specific offender and offense (as measured by the Forgiveness Scale); Pos. = Presence of Positive; Neg. = Absence of Negative (also using the Forgiveness Scale). DF = Dispositional Forgiveness or likelihood to forgive (as measured by the Forgiveness Likelihood Scale). PD = overall Psychological Distress (i.e., Depression=D, Anxiety=A, Stress=S; as measured by the DASS scale).

*p < .05. **p < .01
### Table 2

*Analyses of Effect of Demographic Variables on Major Study Variables*

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>One-Way ANOVA (Between Groups)</th>
<th>Independent T-test</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year in School</td>
<td>Gender</td>
<td>Age</td>
</tr>
<tr>
<td>Major Study Variables</td>
<td>$F$    Sig.  $MSE$</td>
<td>$F$    Sig.  $MSE$</td>
<td>$r$   Sig.</td>
</tr>
<tr>
<td>OQ</td>
<td>.36    .84   2.43</td>
<td>.64    .42   2.00</td>
<td>-.06   .35</td>
</tr>
<tr>
<td>O SF</td>
<td>.55    .70   2.10</td>
<td>.12    .72   1.41</td>
<td>.07    .28</td>
</tr>
<tr>
<td>DF</td>
<td>.36    .83   1.70</td>
<td>.01    .92   .91</td>
<td>.03    .62</td>
</tr>
<tr>
<td>PD</td>
<td>1.81   .127  3.10</td>
<td>.82    .37   2.07</td>
<td>-.05   .42</td>
</tr>
</tbody>
</table>

*Note.* Please see the note following Table 1 for an explanation of some of the variable names.
Table 3

**Regression Analyses Using Interaction of Perceived World-view of the offender and overall Quest to Predict Overall Situational Forgiveness**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>F</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Situational Forgiveness (n=238)</td>
<td></td>
<td></td>
<td></td>
<td>.15**</td>
<td></td>
</tr>
<tr>
<td>Quest Scale (QS)</td>
<td>-.02</td>
<td>.04</td>
<td>-.03</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td>PerceiveTolOpen</td>
<td>2.44</td>
<td>.41</td>
<td>.36</td>
<td>36.18**</td>
<td></td>
</tr>
<tr>
<td>QS x PerceiveTolOpen</td>
<td>.05</td>
<td>.025</td>
<td>.13</td>
<td>4.28*</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Dependent Variable = Overall Situational Forgiveness. QS = Quest Scale (centered); PerceiveTolOpen = Perceived Tolerant and Open-minded World-View of the offender (centered); QS x PerceiveTolOpen = interaction product term.

*p < .05. **p < .01
Table 4

*Descriptive statistics and Correlational Analyses between dimensions of Quest and forgiveness measures*

<table>
<thead>
<tr>
<th>Dimensions of Quest</th>
<th>O SF</th>
<th>Pos.</th>
<th>Neg.</th>
<th>DF</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tentativeness</td>
<td>.06</td>
<td>.13*</td>
<td>.01</td>
<td>.01</td>
<td>48.29</td>
<td>8.92</td>
</tr>
<tr>
<td>Change</td>
<td>-.17**</td>
<td>-.17**</td>
<td>-.13**</td>
<td>-.14*</td>
<td>28.75</td>
<td>10.50</td>
</tr>
<tr>
<td>Ecumenism</td>
<td>-.01</td>
<td>.00</td>
<td>-.02</td>
<td>-.14*</td>
<td>43.88</td>
<td>8.89</td>
</tr>
<tr>
<td>Universality</td>
<td>-.07</td>
<td>-.08</td>
<td>-.04</td>
<td>-.10</td>
<td>22.60</td>
<td>5.56</td>
</tr>
<tr>
<td>Exploration</td>
<td>.08</td>
<td>.13*</td>
<td>.03</td>
<td>.15*</td>
<td>22.72</td>
<td>9.07</td>
</tr>
<tr>
<td>Moralistic</td>
<td>.18**</td>
<td>.17**</td>
<td>.14*</td>
<td>.08</td>
<td>34.28</td>
<td>6.60</td>
</tr>
<tr>
<td>Interpretation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Angst</td>
<td>-.27**</td>
<td>-.23**</td>
<td>-.23**</td>
<td>-.21**</td>
<td>21.28</td>
<td>8.78</td>
</tr>
<tr>
<td>Complexity</td>
<td>-.01</td>
<td>-.01</td>
<td>-.01</td>
<td>.07</td>
<td>37.12</td>
<td>7.70</td>
</tr>
<tr>
<td>Existential Motives</td>
<td>-.17**</td>
<td>-.18**</td>
<td>-.13*</td>
<td>-.24**</td>
<td>21.68</td>
<td>7.27</td>
</tr>
</tbody>
</table>

*Note.* Please see the note following Table 1 for an explanation of some of the variable names. Dimensions of Quest as measured by the MQOS (the Multidimensional Quest Orientation Scale).

*p < .05. ** p < .01
*Bolded*—significant after Bonferonni correction (@ p ≤ .005)
Table 5

Correlational analyses between dimensions of Quest and measures of psychological distress

<table>
<thead>
<tr>
<th>Dimensions of Quest</th>
<th>Depression</th>
<th>Anxiety</th>
<th>Stress</th>
<th>O PD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tentativeness</td>
<td>-.05</td>
<td>.04</td>
<td>.02</td>
<td>.01</td>
</tr>
<tr>
<td>Change</td>
<td><strong>.19</strong></td>
<td>.03</td>
<td>.14*</td>
<td>.14*</td>
</tr>
<tr>
<td>Ecumenism</td>
<td>.00</td>
<td>.03</td>
<td>.07</td>
<td>.05</td>
</tr>
<tr>
<td>Universality</td>
<td>-.02</td>
<td>-.03</td>
<td>.03</td>
<td>-.00</td>
</tr>
<tr>
<td>Exploration</td>
<td>.05</td>
<td>-.02</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Moralistic Interpretation</td>
<td>-.04</td>
<td>-.06</td>
<td>.02</td>
<td>-.03</td>
</tr>
<tr>
<td>Religious Angst</td>
<td><strong>.33</strong></td>
<td><strong>.27</strong></td>
<td><strong>.32</strong></td>
<td><strong>.35</strong></td>
</tr>
<tr>
<td>Complexity</td>
<td>.11</td>
<td>.14*</td>
<td><strong>.20</strong></td>
<td>.18**</td>
</tr>
<tr>
<td>Existential Motives</td>
<td><strong>.19</strong></td>
<td><strong>.17</strong></td>
<td><strong>.25</strong></td>
<td><strong>.24</strong></td>
</tr>
</tbody>
</table>

Note.  PD = Overall Psychological Distress, Depression, Anxiety, Stress, as measured by the DASS (Depression Anxiety Stress Scale). Dimensions of Quest as measured by the MQOS (the Multidimensional Quest Orientation Scale).

*p < .05.  **p < .01  
*Bolded*—significant after Bonferonni correction (@ p ≤ .005)
Figure 1

Moderating Effect of Perceived World-View of the Offender on the Relationship between Quest and Overall Situational Forgiveness

Note. The low and high values of Quest and the perceived tolerance/open-mindedness level of the offender (PerceiveTolOpen) were determined at 2 SDs below and above the mean.