RUNNING HEAD: Moderation of Quest Effect

Intolerance for the Intolerant:
Possible Moderators of the Quest Effect

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Abstract

Once viewed as a universally-tolerant religious orientation, the quest orientation has been found to be associated with decreased acceptance toward those perceived as rigid and inflexible in their belief styles. It is unclear, however, whether the association between quest and interpersonal judgments is moderated by demographic or contextual variables. The present study specifically assessed whether associations between quest and judgments would differ by gender or by experience of mortality salience, variables that have been directly associated with tolerance in past research. To this end, a sample of 223 undergraduate students (95 males and 128 females), was asked to provide judgments and rate the traits of two hypothetical individuals: one tolerant toward homosexuality and flexible in religious beliefs and one intolerant and rigid. As expected, low-quest individuals did not differ in their judgments of the ‘open’ and ‘closed’ individuals, while high quest-individuals were more likely to view the ‘open’ person more positively and the ‘closed’ person more negatively. Gender moderated this effect as female judgments were significantly more dependent on differences in quest orientation than were male judgments. Finally, mortality salience did not interact with quest and interpersonal judgments, although males in the mortality-salience treatment group rated the positive traits of both open and closed individuals higher than did all other participants.
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Psychological research of religion focuses on the separate and distinct ways that individuals orient their religious beliefs. Of particular interest to social psychologists is the way an individual’s religious orientation can determine the degree of compassion and acceptance directed toward other individuals. Accordingly, empirical examinations of this sort set out to examine how religious orientations relate to discrimination on the basis of values, sex, sexual preference, and race (McFarland, 1989). The present research specifically examined the quest religious orientation, which is defined by levels of openness and flexibility.

*Quest Orientation*

Allport (1967), among the first researchers to study religious orientation, proposed the existence of two distinct religious orientations. First, within the *extrinsic* religious orientation, religion is used a means to self-serving ends. That is, individuals with an extrinsic orientation are held to use religion for ulterior motives such as “security, comfort, status, or social support” (Allport & Ross, 1967, p. 441). In contrast, *intrinsic* religious orientation is one where faith and religion are important in and of itself, and act as internalizing motivation used in interacting with the world. This orientation is held to be marked by true universal compassion and acceptance of others.

Batson, Floyd, Meyer, and Winner (1999) tested the universal compassionate nature held to be associated with the intrinsic orientation, questioning whether the perception of the target was relevant in determining the degree of compassion. They found that those scoring high in intrinsic orientation helped a homosexual person less
than they did a heterosexual person. They argued that the compassion associated with the intrinsic orientation was not so universal; that the compassion and acceptance may be reserved for selected people.

In contrast to the two dimensional intrinsic-extrinsic model proposed by Allport, Batson and colleagues (Batson, Eidelman, Higley, & Russell, 2001; Batson, & Schoenrade, 1991; Batson, & Ventis, 1982) suggested a re-conceptualization that included a third orientation, proposing the existence of the *quest* orientation. The quest orientation was proposed to be a view of religion as a sincere, open-minded search for truth. This mature religious orientation was found to correlate with cognitive complexity, doubt, and tentativeness (Batson & Ventis, 1982). It was suggested that a person who views religion as a quest resists the dogmatism and rigidity normally associated with religion and opts instead for an open-ended continual process of religious growth. According to this view, intrinsic religious orientation, also known as the Allport’s end orientation, is simply a rigid adherence to preset religious doctrines and practices that eventually leads to an end in spiritual growth. Extrinsic religious orientation, also known as means orientation, is an immature religion in which a person uses religion only for personal gain. Subsequently, Batson and colleagues suggested that quest orientation is the truest form of religious orientation, as well as the most open-minded and tolerant.

Previous research has established that people high in quest tend to be more open-minded and less prejudiced than those with other religious orientations. McFarland and Warren (1992) conducted an experiment to determine which religious orientation was most likely to read belief-opposing articles. Participants, who were all considered fundamentalist Christians based on their belief in the authority of the Bible, were shown
titles and abstracts of various articles and asked to rate how much they would like to read the articles. Twelve articles were pro-fundamentalism, twelve were anti-fundamentalism, and twelve were on religiously neutral topics. Results indicated that high quest scores predicted a desire to read both belief-supporting and belief-opposing articles, whereas high intrinsic scores only predicted a desire to read belief-supporting articles. High extrinsic scores did not predict the desire to read either the belief-supporting or belief-opposing articles. Accordingly, it was suggested that only the quest orientation is a truly open-minded quest for religious truth.

Due to this open-minded nature of quest, it was further proposed that those adopting the quest orientation would be less prejudiced than other religious orientations. McFarland (1989) tested this hypothesis by asking participants to complete the Allport and Ross (1967) Intrinsic and Extrinsic religion scale, a revised version of Batson and Ventis (1982) Quest scale, as well as various measures of prejudice toward blacks, homosexual persons, women, and communists. Extrinsic religion only predicted prejudice toward blacks, while intrinsic orientation was positively correlated with prejudice against communists and homosexual persons. Quest orientation, however, was correlated negatively with all measures of prejudice.

Research has also found that people who scored high on the Quest scale were less retaliatory than those who scored low on the Quest scale (Greer, Berman, Varan, Bobrycki, & Watson, 2005). In this study, participants were told they would be completing an experiment with a partner with whom they would be competing against. They were told that they would be setting shock levels for the partner to receive when he lost a trial. The shock levels varied from 1 (mild) to 20 (severe). However, the partner's
actions, as observed by shock level settings, were actually controlled by an experimenter. Halfway through the trials, the participant would see that their partner had attempted to deliver a level 20 shock. Retaliatory responses were measured by a combination of the next two shock levels set by the participant. Participants high on quest orientation set significantly lower shock levels for their partner following the attempted level 20 shock than did those low on quest.

Due to these findings, quest has been considered a tolerant and non-prejudiced religious orientation. However, the question remained as to whether the prejudices measured in these studies violated the values of the quest religious orientation. Batson, Eidleman, Higley, and Russell (2001) designed an experiment to determine if the acceptance and tolerance of those high on quest would be extended to others who violated their values. This experiment looked at helping behavior displayed by people who scored high on the quest scale. Participants were told that they would be working on digit circling tasks and that their performance would help other participants chances of winning a gift certificate. Participants were given a note about the participant as well as what the participant planned to do with the money. The first note either depicted the other participant as intolerant of homosexuality or made no mention of intolerance to homosexuality, and the second note either said the participant would use the money to attend an anti-gay rally or to visit their grandparents. Participants were then given the digit circling tasks. Helping behavior was measured as the number of correct responses on the digit circling tasks for the person the participant had received notes about as compared to an unknown participant. Participants high on quest did discriminate against the person who they thought to be intolerant of homosexuality, but only when the money
was going to be used to attend an anti-gay rally. Therefore, it was concluded that those adopting a quest religious orientation were accepting of all people, but their sense of morality did not allow them to support behaviors that violated their values. Clearly, they were tolerant and accepting toward people that held value violating beliefs, but not to the value violation itself.

Although this study provided evidence for viewing the quest orientation as accepting of a wide range of belief contents, even if they violated their value of tolerance, it did not look at acceptance of others who adopted a value-violating belief style. Goldfried and Miner (2002) differentiated belief *content*, simply what a person believes, with belief *style*, which is how a person views his/her beliefs. Beliefs can be held on a continuum from extremely open-minded and willing to change to extremely closed-minded and unwilling to accept any alternative viewpoint. The researchers suggested that it is belief *style*, not *content*, that will create discriminatory behaviors for those who adopt the quest orientation. Therefore, a person can believe any particular *content*, such as a belief in Christianity or Islam, but discrimination will occur when a person holds this particular belief with a closed-minded belief *style*, such as religious extremism or fundamentalism.

To test this hypothesis, Goldfried and Miner followed the methodology of Batson, Eidelman, Higley, and Russell (2001) study. The first note in this study either established the target as a religious fundamentalist, a belief style violation of the open-mindedness of quest, or made no mention of fundamentalism. The second note showed that the target would either use the money to host a dinner party or donate it to a religious fundamentalist organization. They found that participants high in quest were less likely to
help the religious fundamentalist, even when he/she was going to use the money to host a dinner party. High quest participants were also much less likely to help the fundamentalist target who was going to donate money to a fundamentalist organization. Similar to the way that Batson et al. (1999) qualified the extent of universal compassion associated with Allport’s intrinsic religious orientation, these results suggested that the tolerance and acceptance associated with the quest orientation is directed to all beliefs, but only if those beliefs are held in an open-minded manner. That is, high quest individuals are not tolerant toward intolerance.

In sum, quest orientation is held to be a belief style that is marked by openness and universal tolerance toward others. Initial research indicated that quest scores were associated with decreases in prejudice. Later research has indicated that this tolerance is not so universal. Specifically, those high in quest orientation are not as tolerant to those they believe to be closed. That is, they are tolerant to differing views, given that the given views are not intolerant in their eyes. It is unclear, however, whether this ‘intolerance for intolerance’ associated with the quest orientation is moderated by individual differences or contexts. The following review identifies two important constructs that have been associated with interpersonal judgments: gender and mortality salience.

**Gender and Interpersonal Judgments**

Gender stereotypes are widespread and held by many in our society. Men are often seen as independent, assertive, and dominant, while women are perceived as compassionate, gentle, and communal (Bergen & Williams, 1991). Such stereotypes are responsible for differential treatment and discrimination in work places. While there may
be some “kernels of truth” to some sex-expectancies, men and women do not differ as much or as consistently as many believe (Martin, 1987). In fact, men do have access to compassion and women are often assertive. Given this caution, it is important to identify differences that do exist whether they originate from biological factors or through socialization experiences.

One of the first studies of gender and tolerance of others was conducted by Stouffer (1955), who found that women were less tolerant of communists, atheists, and socialists than were men. At first, explanations of this observed gender differences were sparse, stimulating a wave of more theoretically-based research. More recently, Pratto, Stallworth, and Sidanius (1997) provided an explanation using the social role theory, which holds that sex differences emanate from social expectations about the appropriate conduct of men and women. In our society, women have less power and control fewer resources; women do more domestic work, spend fewer hours at job outside of home, and get paid less. As women adapted to roles with less power and status, they showed more cooperative, less dominant profiles than do men. Thus, the social hierarchy and division of labor cause differences in power, assertiveness, and nurture. Accordingly, men are expected to be more agentic and women are expected to be more communal and to be more concerned with others. Because women are lower in social dominance orientation, an orientation that mediates between gender and support for social equality issues, they may be more intolerant of groups that have domination over other groups. Other explanations of differences in tolerance have also been offered.

Burn, Aboud, and Moyles (2000) conducted a study that examined the effect of gender identity on feminism. They found that women who identified strongly with their
gender, as measured by an adapted version of the Crocker and Luhtanen’s collective self-esteem scale, were more supportive of feminism. In contrast, men who identified strongly with their gender were less supportive of feminism. They concluded that those who identify themselves with a disadvantaged group, such as those strongly identifying with their gender as a woman, might be motivated to endorse a stronger struggle for equality. Although it was shown that this identity did increase equality struggle in regards to feminism, it remained unclear if this struggle for equality would also apply to disadvantaged groups to which they didn’t belong.

Two other groups that are currently facing equality struggle are gay men and lesbians. Stevenson and Medler (1995) studied the relationship between sexist beliefs and prejudice against gay men and lesbians. They found that when participants had a positive view of feminism, they were also more likely to be more tolerant of gay men and lesbians. Therefore, it is likely that the disadvantaged status of women not only created empathy for equality of women, but also for other groups experiencing the same disadvantage. This view is supported by research showing that women are less prejudice against homosexuals than men (Hansen, 1982).

Finally, a line of research from the moral development literature may also shed light on potential gender differences in tolerance. Noting that traditional theories of moral development (i.e., Freud, Kohlberg, and Piaget) viewed women as less developed or deficient in their sense of moral justice, Gilligan (1982) maintained that moral perspectives were based upon gender-biased definition of morality. Women, therefore, when assessed with an inappropriate measure, did not match up to the sense of justice and rights of their male counterparts. To account for this disparity, Gilligan proposed that
boys and girls develop different moral voices due to gender differentiated developmental pathways. Males orient toward the focus on *justice and rights* as in traditional theories, while females develop a *communal* orientation.

This difference in development is based upon Chodorow’s (1978) account of early experience that postulates that boys and girls experience the relation with their primary caregiver differently. With development, boys undergo separation with their mothers while girls go through a process of attachment. As boys work to develop a separate identity from that of their mother, they come to focus on an increasingly independent notion of self. Girls, on the other hand develop identity more through association and commitment to others. Gilligan maintains that this early knowledge profoundly affects the child’s understanding of how one should act toward another person. Thus, males develop a *voice of justice* that views morality as involving issues of conflicting rights, while with the *voice of care*, females view morality as involving issues of conflicting responsibilities to others. These differences manifest in judgments of moral concerns as males tend to focus on the salience of logic, fairness and abstract rights, and females look to human connection and interpersonal communications.

In sum, research has shown that while women may be more intolerant of some groups, the observed intolerance may be due to empathy for a disadvantaged group. Due to a history of sexual inequality, women may be more sensitive and empathetic to the inequalities that other disadvantaged groups face today. Moreover, compared to men, women are more focused on the communal ties of social relationships and would be more likely to be sensitive to differences in acceptances and rejection of others than would men.
Mortality Salience and Interpersonal Judgments

Another variable that has been found to affect tolerance is mortality salience. Mortality salience research focuses on the effects of the thought of death on people’s behavior and judgments of others. Although all creatures desire self-preservation, humans have a unique quality that sets them apart from other living creatures. Humans are acutely aware of their existence and surroundings. This awareness leads to a much broader conception of our existence, a conception which inevitably includes the knowledge that one day we will cease to exist. Terror management theory (for a full presentation, see Pyszczynski, Solomon, & Greenberg, 2003) attempts to describe how this knowledge affects people, as well as mechanisms that might serve as a buffer against the terror and dread this knowledge can create.

According to terror management theory, culture serves to protect people from the terror they otherwise would experience due to their awareness of their own mortality. Culture provides people with a sense of meaning and significance that goes beyond their physical existence, thus it reduces the anxiety and terror associated with mortality (Pyszczynski, Solomon, & Greenberg, 2003). Culture offers two main solutions to the problem of death: literal and symbolic immortality. Literal immortality, which is the path of most religions, is the belief that one will continue to live after physical death. Symbolic immortality is the belief that a person can attain mortality by passing on traits, values, or making significant contributions to the culture in which they live.

Terror management theory suggests that because humans are dependent on their culture to protect them and give them purpose, they naturally do not accept the cultures of other people. The mere presence of a culture unlike their own threatens the authority of
their culture; therefore, it is necessary to degrade other cultures while increasing the importance of their own culture when put in a situation in which they must find security in their own cultural worldview. Based on this reasoning, the first hypothesis of terror management theory is that reminding people of their mortality should lead to worldview defense, which is the defense of the participant’s cultural worldview (Pyszczynski, Solomon, & Greenberg, 2003).

Rosenblatt, Greenberg, Solomon, Pyszczynski, and Lyon (1989) tested this hypothesis by measuring how harshly American judges dealt with someone who violated their values. Judges were given a standard personality questionnaire as compared to a personality questionnaire that included the Mortality Attitudes Personality Survey. The Mortality Attitudes Personality Survey was given to make participants aware of their own mortality. This survey asked the participants to (a) describe what they think will happen to them as they physically die and (b) what feelings the thought of their own death arouses in them. They found that participants who were given the mortality salience treatment set significantly higher bonds in a case dealing with prostitution, an act that is seen as a value violation in American culture. In addition, participants in the mortality salience condition gave higher rewards for those who upheld the values of their cultural worldview.

Terror management theory posits two types of defenses against death related thoughts: proximal and distal. Proximal defenses are used when a person is consciously aware of death related thoughts, and they serve to convince the person to view death as a problem for future concern. In contrast, distal defenses are employed only when thoughts of death are not currently in focal attention but are highly accessible. Under these
conditions, worldview defense occurs as an unconscious process that effectively decreases the accessibility of death related thoughts.

Greenberg, Arndt, Simon, Pyszczynski, & Solomon (2000) provide evidence supporting this view. Participants were either given questionnaire packets that included the Mortality Attitudes Personality Survey or a control questionnaire regarding television watching. Participants then completed word search puzzles containing either death related words (death, corpse) or neutral words, such as flower or rock. Two measures, one which measured the proximal defense of vulnerability to death and one which measured the distal defense of cultural defense, were administered directly after the word search puzzles. The level of proximal defense was measured by allowing the participant to engage in vulnerability denying behaviors. Specifically, they were given the opportunity to provide answers on a questionnaire that were consistent with a description of an emotionality type that was not expected to die at an early age. Worldview defense, which served as the distal defense in this study, was measured by evaluations of a pro-American and anti-American essay. These measures were counterbalanced in all groups.

Results indicated that participants who were required to keep thinking about death by means of the death related word search puzzle exhibited higher rates of vulnerability denying, but they did not exhibit higher rates of worldview defense until they were distracted from thoughts of death. Participants who were distracted from the problem of death by the neutral word search puzzle did not engage in the proximal defense of vulnerability denying, but they engaged in worldview defense immediately following the word search puzzle. These results suggest that a person first defends against death
thoughts with proximal defenses, but once the problem is no longer focal to attention, distal defenses, such as worldview defense, are activated.

Further support for the distinction between proximal and distal defenses is the finding that worldview defense occurs immediately after mortality salience is achieved if the mortality salience is achieved through subliminal messages (Arndt, Greenberg, Pyszczynski, & Solomon, 1997). In this study, mortality was made salient subliminally by displaying the word death for 42.8 ms in between filler words. For the control group, death was replaced with the word field. The subliminal method bypassed conscious awareness and therefore, the problem of death was never in the current focal attention of the participants. Thus, proximal defenses were not needed. Accessibility to death related thoughts remained high with the subliminal method, and therefore distal defenses were needed to prevent the thoughts from reaching the focal attention of the participant.

Although worldview defense is common after mortality salience, there are many buffers that help reduce or eliminate this effect. Research has found that high self-esteem (Harmon-Jones et al., 1997), secure attachment (Mikulincer & Florian, 2000), belief in symbolic mortality (Florian & Mikulincer, 1998), and valuing tolerance (Greenberg, Simon, Pyszczynski, Solomon, & Chatel, 1992) can help mitigate negative evaluations of out-group members following mortality salience. Participants who valued tolerance, or for whom tolerance was primed, actually displayed reverse mortality salience effects. In one such study, the investigators reasoned that extremely liberal students would be likely to be more tolerant than students who were extremely conservative in their political views. Instead of derogating a worldview different from their own, it was expected that students who were liberal would value tolerance and evaluate a dissimilar person more
favorably in the mortality salience condition than in the control condition (Greenberg, Simon, Pyszczynski, Solomon, & Chatel, 1992). These results confirmed their hypothesis, and furthermore, suggested a moderating effect of self-esteem defense. Clearly, by living up to their value of tolerance, their self-esteem increased, thereby reducing the anxiety and accessibility of death related thoughts and the need to derogate those with an oppositional worldview.

In sum, mortality salience has been found to affect participant’s tolerance of others. Specifically, participants who received a mortality salience induction tended to display worldview defense by giving better judgments to those who were similar to them and harsher judgments to those who were dissimilar to them.

*The Present Study*

The focus of the present study was to examine potential moderators of the effects of quest orientation on judgments of others. Therefore, the first goal was to demonstrate an association between quest and interpersonal judgments of hypothetical persons who differ in levels of open-mindedness toward religion and homosexuality. Research has indicated that, while the quest orientation is associated with tolerance of others, those high in quest are actually less accepting to those with intolerant belief styles. Accordingly, similar to the findings of Goldfried and Miner (2002), it was hypothesized high quest orientation would be associated with positive ratings of hypothetically *open*-minded individuals. At the same time, high quest orientation would be associated with negative ratings of hypothetically *closed*-minded individuals. Finally, it was expected that the ratings between the hypothetically open and closed persons would not differ for individuals low on quest orientation.
The second goal was to identify potential moderators of this association. Because females have been demonstrated to be more sensitive or in tune with differences between in-group and out-group individuals (Burn, Aboud, & Moyles, 2001; Hansen, 1982) and are more likely to view moral judgments with a communal lens (Gilligan, 1982), it was first hypothesized the quest effect would be more pronounced in females than for males. In addition, because mortality salience (Pyszczynski, Solomon, & Greenberg, 2003; Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989; Greenberg, Arndt, Simon, Pyszczynski, & Solomon, 2000) has been consistently associated with worldview defense (i.e., in-group defense and out-group derogation), it was hypothesized that the quest effect would be more pronounced for those participants for whom mortality was made salient.

These hypotheses were examined in a sample of college-aged men and women who were asked to provide separate judgments of hypothetical individuals. The first individual was portrayed as tolerant to both homosexuality and differences in religion. The second was portrayed as intolerant to homosexuality and as rigid in religious beliefs. Participants provided three sets of ratings for each individual: interpersonal judgments, ratings of positive traits, and ratings of negative traits. Half of the sample was randomly assigned to the treatment condition and received the mortality salience induction, while the other half received a control induction.

Method

Study Design

Because one of goals was to assess the effect of mortality salience, the participants were randomly assigned to two groups: treatment and control. Questionnaires
given to the treatment group included a survey that induced mortality salience, while the questionnaires given to the control group contained a control survey.

World view defense is defined as supporting views similar to one's own and derogating those that are dissimilar. To assess this construct, participants were asked to provide judgments about two hypothetical persons who appeared to differ significantly in levels tolerance and openness. Therefore, each participant rated a hypothetical person who was tolerant and open and one who was not tolerant and not open. To determine which was to be considered dissimilar, participants, themselves, provided a rating describing the extent to which they were similar to each hypothetical individual.

Participants

The sample for the present study included 223 men and women recruited from undergraduate classes at a regional campus of a large Midwestern University. The average age of the participants was 20.90 years (SD = 4.58). The sample included 95 males and 128 females and was primarily Caucasian (94% Caucasian, 2% African American, 1% Asian, 1% Indian/Alaskan American, 1% Hispanic, and 1% other). Most of the students were majored in psychology (17%), English (10%) or Education (10%), while the remaining students were either undecided or were in a major that comprised less than 5% of the sample.

The participants were randomly assigned into either the control or treatment group. The control group included 108 students (58 females and 50 males) whose average age was 21.39 years (SD = 5.29), while the treatment group was comprised of 115 students (70 females and 45 males) whose average age was 20.36 years (SD = 3.75).
The control and treatment groups did not differ significantly in any of the demographic variables (i.e., age, gender, ethnicity, and major).

*Measures*

*Quest orientation.* Quest orientation was assessed with the 12 Item Quest scale (Batson & Schoenrade, 1991), which consisted of 12 items designed to measure openness to change, viewing religious doubts as positive, and willingness to face existential questions. Responses were given based on a scale from 1 (strongly disagree) to 9 (strongly agree). A mean score was computed for analyses with higher scores indicating a higher quest orientation (i.e., being more open). Internal consistency of the measure was acceptable (Cronbach alpha ($\alpha$) = .81).

The sample was divided into two groups for analyses based on a median split of the quest orientation scores (median = 4.75). Those scoring low on the quest scale were defined as *Low Quest* ($N = 112$) and those scoring high were defined as *High Quest* ($N = 109$). Chi-square analyses indicated that low and high quest groups were equally distributed between the control and treatment conditions.

*Mortality salience.* Half of the participants were randomly assigned to the treatment group and half to the control group. Mortality salience was induced in those participants in the treatment group by using the Mortality Attitudes Personality Survey (Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989). This survey asked the participant to (a) briefly describe the emotions that the thought of their own death aroused in them and (b) describe what they think will happen to them as they physically die and are physically dead. Participants in the control group completed a control questionnaire which, while similar in form to the Mortality Attitudes Personality Survey, did not induce
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mortality salience. Instead of questions about death, these participants were asked to describe feelings about a visit to the dentist. Specifically, they were asked to (a) briefly describe the emotions that the thought of undergoing a painful dental procedure aroused in them and (b) describe what they think would happen to them if they underwent a painful dental procedure.

As in past research (Greenberg, Simon, Pyszczynski, Solomon, & Chatel, 1992), each of the surveys was preceded by a filler survey and followed by a distraction task. The filler survey was used so participants were unaware that the focus of the study was mortality salience. The Rosenberg Self-Esteem scale (Rosenberg, 1965) served as the filler survey. This survey was chose due to its short length and time required to complete.

A distraction task was included after mortality was made salient due to the finding that worldview defense is the strongest when thoughts of death are no longer focal to attention (Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994). The distraction task used in this study was a vowel cancellation task. In this task, the participant was asked to circle all vowels within a series of letters. This task took approximately three minutes to complete.

*Hypothetical individuals (Ratees).* Participants were asked to provide judgments about two hypothetical people. The first person (Person A) was depicted as tolerant and open, while the second person (Person B) was depicted as not tolerant and not open (for ease of understanding, Person A will be termed ‘Open’ and Person B will be termed ‘Closed’ for the duration of this paper).

As an introduction to each hypothetical person, participants were asked to read the each person’s pre-completed responses to the Social Worldview scale. This scale is a
combination of the revised 12-Item Religious Fundamentalism scale (Altemeyer & Hunsberger, 2004) and the Attitude toward Lesbians and Gay Men scale (Herek, 1988) created specifically for this study. This scale includes 10 items from the 20 originally included in the Attitude toward Lesbians and Gay Men scale, as well as 10 items from the 12 originally included in the revised 12-Item Religious Fundamentalism scale. Responses vary from 1 (strongly disagree) to 9 (strongly agree). Responses were previously completed by the experimenter to depict a person who was open toward homosexuality and does not hold a religious fundamental belief style (i.e., Open), as well as a person who was not tolerant of homosexuality and does hold a religious fundamental belief style (i.e., Closed).

**Interpersonal judgments.** Participants were asked to read the responses of each hypothetical individual and then rate them with two separate assessments. First, judgments of the hypothetical persons were assessed by the *Interpersonal Judgments Scale* (Byrne, 1971). The Interpersonal Judgments Scale includes six questions pertaining to perceived intelligence, knowledge of current events, morality, adjustment, as well as personal feelings toward the target and the extent to which the participant would enjoy working with the target in an experiment. The participant checked one answer from a list of seven potential answers in Likert format with low scores indicating a negative view, middle scores indicating a neutral view, and high scores indicating a positive view. Mean scores across items was created for analyses with a high score indicating a positive attitude toward the target and lower score indicating a negative attitude toward the target. Internal consistency of this scale was acceptable (Cronbach alpha (α) = .84).
Trait ratings. As a second assessment of each hypothetical person, participants were asked to complete the Trait Rating scale of 20 traits. Participants were asked to indicate the degree to which they believe the person possessed each trait on a Likert-like scale from 1 (not at all) to 9 (very much). This scale was created for this study using traits from Anderson's list of 555 personality traits (Anderson, 1968). Each word on Anderson's list has been previously rated for likeableness by 100 participants. The words included in the present survey were words that have been rated on either the upper or lower end of likableness. The positive traits included generous, polite, pleasant, sincere, patient, sensible, forgiving, helpful, understanding, and friendly. The negative traits included unsympathetic, fault-finding, prejudiced, boastful, uninteresting, irritable, rude, complaining, cold, and narrow-minded. Mean scores of the positive and negative traits were computed resulting in a positive and negative variable for each hypothetical person rated. The positive and negative ratings were negatively correlated for both Open \( r = - .68, p < .001 \) and Closed \( r = -.60, p < .001 \). The internal consistencies of these scales were high (Cronbach alpha \( a = .91 \) for Open-positive traits, .88 for Open-negative traits, .94 for Closed-positive traits, and .90 for Closed-negative traits).

Similarity. With a 7-point Likert scale, participants were asked to rate the degree to which they felt that they were similar or dissimilar to each the hypothetical individuals with low scores indicating dissimilarity and high scores indicating similarity. These two scores (similar to open and similar to closed) were used to create a combined index describing whether the participant was more similar to the closed person or to the open person. Using a K-means cluster analysis, a variable was created that distributed the participants into one of two groups. The first group, was composed of 82 participants
who were dissimilar to the open individual and similar to the closed person ($M_s = 1.78, 5.40$ respectively). The second group, was composed of 136 participants who were similar to the open individual and dissimilar to the closed person ($M_s = 5.10, 1.93$ respectively). For analyses, this variable was coded as $1 = \text{similar to open individual}$ and $2 = \text{similar to closed individual}$.

**Procedure**

*Recruitment and administration of surveys.* Recruitment and survey administration took place during a normal class period in groups of 15-50 students. Participants were recruited immediately before the administration of surveys. A co-investigator explained that the purpose of this study was to further research on attitudes and that the study involved filling out brief personality surveys as well as making evaluations of others based on previous surveys they have completed. Participants were told that their participation was voluntary and that they may stop at any time. It was also stressed that participation would not affect their grade in the class. Students were told that they may choose to study quietly at their desk in place of taking the survey. Students who chose to participate were asked to read and sign a consent form before beginning the survey. Participants were also told that they must be 18 years of age or older to participate in this study.

The experimenter passed the questionnaires out to the participants and asked the participants if they had any questions, as well as told them that they could ask questions while taking the questionnaire if necessary. The participants were randomly assigned to either the control group or experimental group by handing out the questionnaire packets alternating between control and experimental packets. The experimenter also asked the
participants to complete the surveys in the packet in the order they appear. The participants were then instructed to turn the questionnaire into the experimenter when finished and remain in the classroom until all participants were finished taking the questionnaire.

*Debriefing.* After all the questionnaires were turned in, the participants were debriefed. During debriefing, the experimenter explained that the study's main focus was to look at the effects of religious orientation on judgments of dissimilar and similar others, as well as explained why the Mortality Attitudes Personality Survey was used. Participants were given an opportunity to ask questions about the study. Participants were also told that research staff would be available if they had any further questions or concerns regarding the study. Participants were also asked to not discuss the study with other students until all the data was collected.

*Statistical Analyses.* Quest effect and related moderation effects were tested using separate repeated-measures Analyses of Variance (ANOVAs). Moderation by gender was to be indicated by a statistically significant interaction effect involving the participant’s gender, quest level, and the type of person rated (ratee). As in previous research (Greenberg, Simon, Pyszczyski, Solomon, & Chatel, 1992; McGregor et al., 1998) the effect of mortality salience on judgments was also tested using repeated measures ANOVA’s. Evidence of worldview defense would be evident when, in the treatment condition (mortality salience) individuals rated similar individuals more positively and dissimilar individuals more negatively. Therefore, worldview defense would be found with a significant interaction effect between mortality salience, similarity
to person rated, and type of person rated. Moderation of the quest effect would be evident with a further interaction with participants’ quest level grouping.

Results

The results are presented in two sets of analyses. The first set examines the overall effect of quest level on ratings of hypothetically open and closed individuals. The second set examines whether gender and mortality salience moderates this effect.

**Quest Level and Interpersonal Ratings**

The first goal was to examine whether ratings of hypothetically open and closed individuals was related to quest orientation. Separate 2 (Quest level) X 2 (Ratee: Hypothetically Open vs. Closed individuals) repeated ANOVAs were conducted on each of the three assessments (i.e., interpersonal judgments, positive traits, and negative traits) with Quest level as between-subjects variable and ratee as within-subjects variable. As expected there were significant main effects for type of person rated, for each of the assessments: Interpersonal judgments, $F(1, 219) = 18.70, p < .001$, Positive traits, $F(1, 215) = 57.21, p < .001$, and Negative traits, $F(1, 215) = 98.25, p < .001$. As indicated in Table 1, the hypothetically open person was consistently rated more positively and less negatively across all issues.

As hypothesized, however, interaction effects qualified these results for each assessment. Ratee and quest level were found to interact significantly for Interpersonal judgments, $F(1, 219) = 17.87, p < .001$. As illustrated in Figure 1, post hoc analyses revealed that participants in the low quest group did not differ significantly in their ratings of the open and closed individuals, while there were significant differences for
participants in the high quest groups, $t(108) = 6.25, p < .001$. High quest participants judged the open person very positively and the closed person very negatively.

Analyses of the Positive trait ratings, $F(1, 215) = 9.72, p < .01$, and Negative traits ratings, $F(1, 215) = 11.34, p < .01$, revealed similar interaction effects between quest level and ratee. While individuals in the low quest groups did rate the open individuals more positively and less negatively than the closed individuals, the difference was significantly more profound for participants in the high quest group. As illustrated in Figure 2, participants in the high quest group rated the traits of the open individual as significantly more positive, $t(215) = -2.91, p < .01$, and less negative, $t(215) = 3.09, p < .01$, than did participants in the low quest group. They also rated the traits of the closed individual as significantly less positive, $t(218) = 2.56, p < .05$, and more negative, $t(218) = -2.69, p < .01$, than did participants in the low quest group.

**Quest, Gender, and Interpersonal Ratings**

To assess further moderation of the quest effect, separate 2 (Gender) X 2 (Quest level) X 2 (Treatment condition: Mortality salience vs. control) X 2 (Similarity: participant rates self as similar to open person vs. similar to closed person) X 2 (Type of person rated: Open vs. Closed) repeated measures ANOVAs were performed on each of the three judgment ratings with gender, treatment, quest level, and similarity as between subjects variables and type of person rated as within subjects variable.

In the analysis of interpersonal judgments, there was a significant gender effect, $F(1, 200) = 7.62, p < .01$, as females ($M = 4.22, SD = .50$) rated hypothetical individuals higher than males ($M = 4.09, SD = .50$). As expected, this effect was qualified by a significant Ratee X Gender X Quest level interaction, $F(1, 200) = 4.27, p < .05$. Post-hoc
analyses indicated that there were no differences among low quest males and females in their ratings of open and closed individuals. Differences were apparent, however, for some of the high quest individuals. Specifically, a significant ratee by quest level interaction for females, $F(1, 26) = 24.39, p < .001$, indicated that females rated the open individual more highly and rated the closed individual more negatively. In sum, as illustrated in Figure 3, differences in quest level were not significantly associated with differences in males’ ratings of open and closed individuals. The quest effect, however, was observed in the females. Specifically, the difference in rating the open and closed individuals was more extreme for high quest females than all other participants.

In the analysis of positive trait ratings, there was a significant main effect for rate, as across all participants, the open individual was judged to have more positive traits than was the closed individual, $F(1, 196) = 41.66, p < .001$. The above described Gender X Quest Level X Ratee interaction effect $F(1, 196) = 6.04, p < .05$ was also present for the ratings of the positive traits. Post hoc analyses revealed that there was no interaction between ratee and quest level for the males, but there was for the females, $F(1, 124) = 17.18, p < .001$. As illustrated in Figure 4, quest level was not associated with differences in male participants’ positive trait ratings of open and closed individuals. For the females, however, quest level was associated with differences in ratings between the open and closed individuals. Compared to low quest females, high quest females rated the positive traits of the closed individual lower and the positive traits of the open individual higher.

Analyses of the negative traits also revealed a significant main effect for rateee, $F(1, 196) = 74.78, p < .001$, as the closed individual was seen to have more negative
traits than the open individual. The Gender X Quest Level X Ratee interaction was marginally significant, $F(1, 196) = 3.07, p < .10$.

**Quest, Mortality Salience, and Interpersonal Judgments**

Analyses regarding mortality salience revealed that mortality salience did not interact with the quest effect for any of the three interpersonal judgments. There was however, one interesting gender X mortality salience interaction for positive ratings, $F(1, 196) = 4.75, p < .05$. As illustrated in Figure 5, under the control condition, there is no difference between males and females in their ratings of the positive traits of hypothetical individuals (both open and closed). In the mortality salience condition, however, males were more likely judge that individuals have positive traits and females were less likely to acknowledge individuals’ positive traits.

**Discussion**

Previous research has shown that, although once proposed as a universally-tolerant religious orientation, those adopting the quest religious orientation have limits to their tolerance when considering differences in belief style. Specifically, those adopting a quest religious orientation have been shown to judge people who have a closed or rigid belief style more negatively than those who hold their beliefs in a more open-minded manner (Goldfried and Miner, 2002). The focus of the current study was to examine possible moderators that affect the relationship between quest religious orientation and judgments of others. Specifically, the present study examined the effects of mortality salience and gender on the ratings of hypothetical people by both high and low quest participants.

**Quest Level and Interpersonal Ratings**
To determine the relationship between quest level and interpersonal ratings, participants completed the Interpersonal Judgments Scale, a positive traits scale, and a negative traits scale. Across all three scales, a significant interaction between ratee and quest level was found. This meant that while no significant difference was observed for ratings of the open individual and closed individual for low quest participants, high quest participants consistently rated the open individual positively and the closed individual negatively.

Previous research regarding the quest orientation and tolerance for people who were intolerant of homosexuals found that people high in quest only held prejudiced attitudes, as measured by helping behavior, if the person displayed behaviors that related to their dislike of homosexuals (Batson, Eidelman, Higley, & Russell, 2001). For example, high quest participants would help a person who was intolerant of homosexuality, but not if they would give the money they won to an anti-homosexual organization. They argued that high quest individuals were not intolerant of other people themselves, just other people’s behaviors. In the present study, however, we found that high quest participants did judge people who are viewed as intolerant toward both homosexuality issues and religion much more negatively than low quest participants even without a specific behavior given.

The present study’s findings are similar to those of Goldfried and Miner (2002), although their study only focused on the issue of religious fundamentalism. They concluded that for questing individuals, belief content of the person was not as important as belief style. Therefore, they are not intolerant of the belief content of intolerance toward homosexuals, whereas they would be intolerant of the belief style of religious
fundamentalism because it is rigid and absolutist in contrast to the open-mindedness of the quest orientation. However, it could be argued that although questing individuals are open-minded to various belief contents, they themselves have a rigid belief style, an absolutist approach on openness toward all belief content, which creates the observed intolerance of those who do not. Therefore, they can be seen as just as rigid in their belief style as religious fundamentalists, although they may be accepting of a wider range of belief contents.

Regardless of the reason for their intolerance, the current research further confirms that those adopting a quest orientation are not as universally tolerant as once proposed (Batson, Eidelman, Higley, & Russell, 2001). Rather, they harbor intolerance, as others, for those with different belief styles. Specifically, they are intolerant of intolerance. In theory, the quest orientation is an open, tolerant orientation. Therefore, one would expect people who are high in quest should not discriminate between people with different belief systems.

**Quest, Gender, and Interpersonal Ratings**

In contrast to previous studies which have not mentioned any significant gender differences among quest participants regarding tolerance of others (Batson, Eidelman, Higley, & Russell, 2001; Goldfried & Miner, 2002), high quest females consistently rated the open individual significantly higher and the closed individual significantly lower than high quest males. Furthermore, there was no difference in ratings of males and females among low quest participants. In essence, the results indicated that the quest effect occurred for women but not for men. That is, questing women discriminated between
open and closed individuals in their judgments much more than did men. The question remains as to why differences in quest affect women so much more than they do men.

One explanation for this effect is that women have been found to be more intolerant of groups which have domination over others (Pratto, Stallworth, & Sidanius, 1997). Women are typically lower in social dominance, and therefore may be more sensitive to social equality issues. Therefore, due to the intolerance of homosexuality in our culture, women may be more sensitive to their struggle for equality, and thus rate people who are tolerant of homosexuality better and those who are not tolerant worse. The reason this is observed only in the females who are also high in quest could be due to the previous finding that low quest participants are not as accepting of homosexuality in general (McFarland, 1989). Therefore, both male and female low quest participants would rate the person tolerant of homosexuality the same because women in this group are not as accepting of homosexuality, thus negating the effect of being sensitive to their social inequality.

Another explanation is that men and women maintain different moral perspectives (Gilligan, 1982). Women are more likely to judge moral concerns with an emphasis on communal ties and maintenance of social bonds than are men. Thus, compared to questing men, questing women are more likely to consider how the open-mindedness and close-mindedness of the respective hypothetical individuals may help or harm different people. They are more likely to think about the consequences of a belief system on specific social relationships and are therefore less tolerant to those who may harm others with their negative beliefs. Questing men, on the other hand, may be more attuned to differences in others’ belief systems, but their consideration focuses on more abstract
concepts of justices and rights. Without reflection of the actual human consequences on social relationships, men’s consideration of the cost of intolerance on others may not be as significant as it is for women.

*Quest, Mortality Salience, and Interpersonal Judgments*

Although previous research has demonstrated that worldview defense occurs after mortality salience (Pyszczynski, Solomon, & Greenberg, 2003; Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989; Arndt, Greenberg, Pyszczynski, & Solomon, 1997), there were no significant mortality salience interactions with the ratings of high quest or low quest participants. In fact, the mortality salience effect on world view defense was not even evidenced. One explanation for the lack of worldview defense was in the way the Mortality Attitudes Personality Survey was administered. Previous studies examining mortality salience effects have been performed on sample sizes around 50, with only 4-5 participants in each group (Greenberg et al., 1990). Furthermore, participants were put in their own individual cubicle to complete the surveys. In the present study, participants were given the surveys in large groups ranging from around 15-50 participants. Participants were not in a quiet, secluded cubicle environment, but rather in a large classroom setting. Therefore, the environmental conditions may not have been conducive to the mortality salience induction.

Interestingly, exploratory analyses indicated that there was a significant difference between the ratings of male and female participants’ ratings of individuals’ positive traits based on the treatment group. Males in the mortality salience group males were more likely to acknowledge the positive traits of both individuals than were males in the control group and, conversely, females experiencing mortality salience were less likely to
rate individuals with positive traits than females in the control condition. In the control group, there was no significant difference between the ratings of male and female participants. Previous research has not found gender differences in the effects of mortality salience, with the exception of the finding that males who received mortality salience treatment displayed more aggression, as measured by hot sauce allocation, than females (McGregor et al., 1998). There is no specific research, however, to explain why males who received mortality salience would provide more positive judgments than females. One explanation could be that the men in this sample placed a higher value on tolerance than the females in this sample, therefore, after mortality salience, they became more tolerant of all individuals in order to live up to their value of tolerance. This reaction to mortality salience has been found in previous studies (Greenberg, Simon, Pyszczynski, Solomon, & Chatel, 1992).

**Limits and Future Directions**

The results of this study further support the findings that the quest religious orientation is not a universally tolerant orientation. Specifically, this study suggested that gender may have a moderating effect on the relationship between quest and interpersonal judgments. The findings contribute to the research literature on religious orientations and tolerance by further exploring individual differences in the relationship between quest religious orientation and tolerance of individuals who hold opposing belief content or styles. The findings also contribute to research on gender and tolerance of others, specifically on how males and females differ on the judgments of people based on their views toward homosexuality and religious fundamentalism. However, since this study
was conducted in a primarily white, middle class college, further research is needed to
determine if the results are found across various social classes and ethnicities.

One of the main limitations of this study is that the judgments of views on
homosexuality versus religious fundamentalism cannot be separated. That is, the Open
individual was judged regarding both the view of acceptance of homosexuality as well as
open to various religions, while the Closed individual was judged both on being anti-
homosexual as well as being a religious fundamentalist. Further research should be
conducted to determine how the ratings of others are affected based solely on their views
toward homosexuality or the extent they adopt a fundamental religious style. Future
research on quest and tolerance could also expand to including attitudes toward people
who adopt specific religions, such as comparing attitudes toward people who identify
with exclusive religions (such as Christianity, Islam, and Judaism) with attitudes toward
people adopting more inclusive religions.

Another topic for further research is the effect of gender on tolerance, especially
in regards to the how gender affects the ratings of people adopting a questing religious
orientation. Future studies could concentrate on what particular groups of people women
are less tolerant to, and for what groups the intolerance is based on the quest orientation
versus women in general.
References


reactions to others who threaten one’s worldview? *Journal of Personality and Social Psychology, 63*, 212-220.

Greer, T., Berman, M., Varan, V., Bobrycki, L., & Watson, S. (2005). We are a religious people; We are a vengeful people. *Journal for the Scientific Study of Religion, 44*, 45-57.


Table 1

Mean Ratings of Hypothetically Open and Closed Individuals by Quest Level

<table>
<thead>
<tr>
<th>Quest Level</th>
<th>Total</th>
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<tr>
<td></td>
<td>Low (1)</td>
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<tr>
<td>Interpersonal Judgment</td>
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<tr>
<td>Open Individual</td>
<td>4.15 (1.18)</td>
</tr>
<tr>
<td>Closed Individual</td>
<td>4.14 (1.29)</td>
</tr>
<tr>
<td>Positive Traits</td>
<td></td>
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<tr>
<td>Open Individual</td>
<td>5.66 (1.51)</td>
</tr>
<tr>
<td>Closed Individual</td>
<td>4.93 (1.70)</td>
</tr>
<tr>
<td>Negative Traits</td>
<td></td>
</tr>
<tr>
<td>Open Individual</td>
<td>4.36 (1.48)</td>
</tr>
<tr>
<td>Closed Individual</td>
<td>5.56 (1.55)</td>
</tr>
</tbody>
</table>

Note: Standard deviations in parentheses.
Figure Captions

*Figure 1.* Quest level and interpersonal judgments.

*Figure 2.* Quest level and positive trait ratings (a) and negative trait ratings (b).

*Figure 3.* Gender and quest effects on interpersonal judgments.

*Figure 4.* Gender and quest effects on positive trait ratings.

*Figure 5.* Gender and treatment effects for positive trait ratings.
a. Moderation of Quest Effect

Positive Traits

<table>
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<th>Quest Level</th>
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<td>Low Quest</td>
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<td>High Quest</td>
<td>Closed</td>
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</table>

b. Negative Traits

<table>
<thead>
<tr>
<th>Quest Level</th>
<th>Negative Traits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Quest</td>
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