RELIGIOUS ORIENTATION AND RESPONSES TO ANXIETY:

THE MEDIATING ROLE OF TRUST

by

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ABSTRACT

RELIGIOUS ORIENTATION AND RESPONSES TO

ANXIETY: THE MEDIATING ROLE OF TRUST

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This research experimentally manipulated death anxiety and examined its effects on social, spiritual, and self-support. Individual level of religiosity was examined as a moderating variable. Various forms of trust were examined as potential mediators of the relationship between death anxiety and sources of support. The participants' ages ranged from 17-48 ($M =$ 22.13 $SD =$ 6.30), including 141 females and 39 males. A marginally significant interaction ($p =$ .09) was found between experimental condition and participant level of religiosity in predicting general support by God, such that intrinsic religiosity predicted general support by God most strongly in the anxiety condition, compared to the mortality salience and control conditions. Trust was not found to be a significant mediator of the link between anxiety and support. This project was the first to combine intrinsic religiosity and a mortality salience manipulation in predicting preferred choices of support.

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CHAPTER 1

INTRODUCTION

This study investigated how people with varying levels of intrinsic religiosity deal with anxiety. Specifically, it explored why some people exhibit a greater tendency to seek out friends and family during anxiety-ridden situations whereas others pray and believe that God will see them through. When individuals experience anxiety-inducing situations, they are motivated to reduce this unpleasant state. The means to accomplish this, however, were expected to vary as a function of intrinsic religiosity. In this experiment, intrinsic religiosity was operationalized using Allport and Ross' (1967) intrinsic and extrinsic religious orientation scale. An individual exhibiting a high intrinsic religious orientation has a genuine need for, and devotion to, his/her religion (e.g., "I try hard to carry my religion over into all my other dealings in life"), whereas an extrinsic religious orientation is more associated with external motives for religious beliefs (e.g., "My house of worship is most important as a place to formulate good social relations"). This study focused on intrinsic religiosity because previous research has shown that an extrinsic religious orientation is not a valid predictor of religiosity (Donahue, 1985).

Religious individuals seek refuge from anxiety through prayer and faith that God will see them through troubling times. Less religious individuals may instead benefit more from the support of other individuals (friends/family) when experiencing anxiety. This study attempted to explain why individuals who vary along the dimension of religiosity are differentially motivated to seek out friends/family or God when experiencing anxiety. The main purpose of this experiment was to test the idea that an individual's level of religiosity (high vs. low intrinsic religious orientation) would affect their preference for support (God vs. friends/family) as a function of random assignment to anxiety (death anxiety, anxiety, control). Previous research regarding religion, death anxiety, and support systems has been primarily correlational. To my

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knowledge, the specific hypotheses that I address here have not been empirically investigated. By randomly assigning participants into different anxiety-provoking conditions (including a control condition), the causal relationship between religiosity (high vs. low intrinsic religious orientation), death anxiety, and preferred support systems can be better approximated. Much of the previous research has focused on survey methodologies and has investigated correlations between participants' trait death anxiety and religiosity (e.g., Hui & Fung, 2008; Ryff, 1989). Before presenting the specific hypotheses of this research, I will discuss (a) the general effects of anxiety on various psychological processes, (b) terror management theory and its predictions, (c) religious orientations and different targets of support, and (d) the potential mediating role of trust.

Anxiety

Despite its ubiquity, anxiety is a difficult emotion to define. Generally, anxiety is a negative affect or mood state that is associated with potential, yet unspecified and often uncontrollable, threats. Massimini, Csikszentmihalyi, and Carli (1987) argued that anxiety results from situations that are highly challenging but with which an individual lacks the resources to cope. It often serves a clearly cautionary role (Jackson, 1975), in the sense that it signals potential dangers in one's environment.

Researchers have identified several important outcomes of anxiety. Anxiety, in general, has been found to result in conservative or safe behavioral choices. Anxiety has been shown to increase attention to threat-related stimuli (see Mathews, 1990). Unlike sadness, anxiety can lead to an increase in stereotypic thinking or superficial processing of group-related information (Baron, Inman, Kao, & Logan, 1992; Henderson-King, 1994; Wilder, 1993). This may be due to the arousal components of anxiety (a) reducing cognitive capacity for elaboration, and (b) heightening self-categorization processes via the increase in salience of relevant and accessible category cues (see Wilder, 1993).

Lerner and Keltner (2001) demonstrated that fearful individuals have pessimistic risk perceptions and make choices that indicate risk-aversion. Raghunathan and Pham (1999) examined differences between sad and anxious individuals, and their results suggested that anxiety tends to decrease risk-taking, as compared to sadness. These latter findings were interpreted in light of the affect-as-information model (Clore et al., 2001), whereby the feeling states of anxiety and sadness predispose individuals to prefer safe outcomes. The affect-as-information model (Clore et al., 2001; Schwarz, 1990; Schwarz & Clore, 1983) argues that feeling states are informational in the sense that they indicate to the perceiver whether the environment is benign or harmful. According to this model, as long as individuals are not explicitly aware of the source of their feelings, the feelings will influence the evaluations and judgments of target stimuli or persons. Thus, persons in a positive affective state will assume that the environment is benign and tend to process information heuristically, whereas persons in a negative affective state will assume that the environment is potentially dangerous and process information in a more cautious, analytical way.

Those interested in a set of simple predictions regarding the effects of positive versus negative affect will likely be disappointed, however (cf. Fiedler, 2001), because one must also take into account the appraisal processes resulting in and flowing from specific emotional states within each emotional valence (viz., positive and negative; see also Dunn & Schweitzer, 2005). In other words, even within the array of negatively valenced emotions, different outcomes are likely to result as a function of the different characteristics of these emotions (C. A. Smith & Ellsworth, 1985; Mackie, Devos, & E. R. Smith, 2000; Roseman, 1984). For example, sadness and anger are both negative emotions, but differ with respect to the level of arousal that typically accompanies each. Anxiety differs from sadness and anger along the dimension of situational versus personal control. That is, whereas sadness and anger result from events that have high person control (not necessarily the self; see also Parkinson, 1999, 2001), anxiety is marked by

perceived situational control, or the lack of person control. Anxiety also differs from sadness and anger in its associated certainty appraisal (C. A. Smith & Ellsworth, 1985). Whereas sadness and anger result from events that are typically certain, anxiety is marked instead by a high degree of situational uncertainty. One method of manipulating situational uncertainty is having people contemplate their death, according to terror management theory. Researchers working from the terror management perspective (Greenberg, Solomon, & Pyszcynski, 1997) have used manipulations involving thoughts about death (death anxiety) to reveal some intriguing effects. Research driven by the terror management perspective is discussed here below.

Terror Management Theory

The realization of the finitude of life sets human beings apart from other animals (Tomas-Sabado & Limonero, 2006). The thought of our demise can be considered an anxiety that we carry throughout our lives (Becker, 1973). Terror management theory states that we, as humans, are innately afraid of death and utilize certain coping strategies in order to buffer this anxiety (Greenberg, Solomon, & Pyszczynski, 1997). Greenberg et al. (1997) developed their work from Ernest Becker's (1973) theory in which the universality of death terror and the need to protect against it play an essential role in our lives. One method of managing death terror concerns the adoption of one's cultural worldviews. "Cultural worldviews" consist of one's belief system, which encompasses the ideologies and faith in their culture. This cultural belief system helps explain our existence, and believing in it provides the world with meaning, which in turn provides a sense of personal value. A second method used to buffer death anxiety, according to terror management theory, is to bolster one's self-esteem. Self-esteem can be attained by an individual truly believing in the cultural worldview while also living up to its standards. Taken together, these are the methods used to cope with the fear of death.

Using this logic, one can expect that someone who is highly intrinsically religious (lives up to and believes in their cultural worldviews) alleviates anxiety, particularly death anxiety, by

believing in and focusing on his/her certain religion, as part of one's general worldview. Contemplation of one's demise can be considered an extreme form of an anxiety-provoking experience. A person who is highly intrinsically religious and faced with an anxiety-provoking situation may be more comforted by his/her religion (God or some supreme being) than by another human being or even a group of people.

Using terror management theory, Norenzayan and Hansen (2006) conducted several different studies to investigate the effects of mortality salience on the belief in supernatural agents (i.e., God). In study 1, participants were randomly assigned to a mortality salience condition or a control condition (about favorite foods) and were then asked two questions: "How religious are you?" and "How strongly do you believe in God?" Mortality salience (compared to the control condition) led to stronger reported religiosity and a stronger reported belief in God. In study 2, they tested the hypothesis that mortality salience would lead individuals to believe that an unusual phenomenon (e.g., that praying leads to pregnancy) confirms their belief in God and that only He can answer their prayers. They randomly assigned participants to read a story in one of three priming conditions, which were a death story, a religious story, and a neutral story condition. The death prime involved a situation where a child and the child's mother are going to visit the father in the hospital and on the way, the child gets hit by a car and dies. The religious prime begins the same as the death prime except as the mother and child enter the hospital they see many religious items (e.g., a man praying, the hospital chapel). Finally, the neutral story involved a child watching an emergency drill. The authors created a religious prime in order to test whether the death prime would intensify reported religious beliefs more so than a religious prime. After the participants were primed, they then read a *New York Times* article that explained a scientific discovery supporting the power of prayer (ostensibly as a second study). Finally, after the prime and the article, participants answered questions regarding God's existence and God's ability to answer prayers. Again, they found that those in the death prime

condition had a greater belief in God and the power of prayer, compared to the religious prime and the control.

Maton (1989) correlationally investigated how spiritual support (i.e., perceived support from God) can act as a stress-buffer. His sample consisted of high-stressed individuals (recently bereaved parents) and low-stressed individuals (less recently bereaved parents) who were attending the mutual help group called, "Compassionate Friends." The participants were asked questions concerning how they had adjusted their life since their loss, via a personal adjustment scale (regarding spiritual support, church attendance, social support-friends and parents). He found that individuals in the high-stress group benefitted more in personal adjustment from spiritual support than from social support from parents or friends. The low-stressed group did not benefit from spiritual or social support. This study demonstrates the idea that in stressful situations, spiritual support may be a more comforting avenue than social for some individuals. Although this study did not manipulate mortality salience, it is another example depicting the role of spiritual support in stressful situations.

Jonas and Fischer (2006) examined the relationship between religiosity and the methods individuals use to deal with the thought of their mortality. Adopting a terror management theory perspective, they argued that religion serves the purpose of providing people with meaning and significance in their lives while also adding a feeling of eternality. According to proponents of this theory, one of the most basic fears of all human beings is the idea of non-existence (Becker, 1973); therefore, Jonas and Fischer were interested in how religion can help individuals manage this fear. They argue that intrinsically religious individuals can adequately manage their fear of death (i.e., mortality salience) because of their genuine belief in their religion.

One of Jonas and Fischer's (2006) questions of interest was whether religious individuals increase their religious behaviors (e.g., went to church or prayed more) in order to

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deal with threat (i.e., terrorist attacks). In this correlational study, all participants read a short description about terrorist attacks and were asked questions regarding certain coping strategies they would prefer to engage in. They found that intrinsic religiosity was positively correlated with belief in God as a coping strategy. When asked if "talking to other people about the danger of terrorist attacks" is an effective coping strategy, highly intrinsic religious individuals did not find this method as satisfying. This finding relates to the aforementioned point that religious individuals may turn to a higher supreme being when in a fearful/anxious situation rather than seek support from fellow human beings. Intrinsically religious people tend to rely on their religious faith when faced with fearful/anxious arousing situations (Jonas & Fischer, 2006). Religion (i.e., believing in a higher power) plays a significant role in managing or dealing with the fear of the unknown (e.g., anxiety-provoking situations).

This experiment is similar to Jonas and Fischer's (2006) research, but this study experimentally manipulated anxiety and investigated its role on sources of support (i.e., praying or going to friends). Jonas and Fischer only correlated religious behaviors with religious orientation and used only a single item to measure religious behaviors; the sample size was also very small (N = 39). This study also investigated the mediational role that trust (in God or people) plays in the relationship between religiosity and source of support (e.g., through faith or social support). Previous research has investigated religion's role in anxiety-ridden experiences (discussed below); however, to my knowledge, no studies have addressed how religious beliefs work to assuage uncertainty.

Critique of Terror Management Theory

Some writers have questioned whether the effects found in the terror management literature are due to death salience per se, or to uncertainty in general. For instance, McGregor, Zanna, Holmes, and Spencer (2001) suggested that self-related uncertainty may be the key factor. Personal uncertainty (i.e., self-integrity threat) occurs when people experience

inconsistent thoughts regarding how they view themselves. These authors conducted four different studies to test the idea that when individuals are faced with personal uncertainty (either in the form of mortality salience or temporal discontinuity) they will try to regain certainty by affirming other self-relevant aspects. Temporal discontinuity occurs when you think of yourself in a future sense that is different from your present/past idea of yourself. If there is a discrepancy between the present idea of yourself and one aspect of who you are (e.g., I want to be independent but I still live with my parents) you will try to regain certainty by affirming other self-relevant aspects of who you are (e.g., what you do for a living). For example, the stimuli used to manipulate temporal discontinuity were: "Please briefly describe the events, people, and location associated with an important, vivid memory from your childhood or adolescence" and "Jot down how you imagine the scene of this above memory might be changed if you revisited it in the year 2035." The authors' logic is that when an idea of a person's self is inconsistent with how he/she would like to be (e.g., I want to be independent but I still live with my parents), one way of alleviating the inconsistency is by emphasizing and confirming other self-relevant aspects that he/she may possess (e.g., I am a great salesperson and I am in a wonderful relationship).

McGregor et al. (2001) argue that any threat to the self (as we see ourselves) will cause the same reactions as a mortality salience manipulation. For instance, in their study 3, participants were randomly assigned to one of two uncertainty inductions (mortality salience vs. temporal discontinuity) and were then asked to rate how much they favored their ingroup (University of Waterloo students). Mortality salience and temporal discontinuity led to the same results (more ingroup bias), which has been shown in the mortality salience literature before (Harmon-Jones, Greenberg, Solomon, & Simon, 1996). Based on such findings, McGregor et al. (2001) argue that threats to self-relevant thoughts can lead to responses similar to those

following thoughts of mortality, indicating that the idea of "mortality salience" may only be threatening how we view ourselves.

Anxiety and Religion

Apart from the Terror Management approach dealing with death anxiety, researchers have, for decades, sought to understand the relationship between religiosity and anxiety in general. Addressing the role of religion in dealing with anxiety issues, Jackson (1975) differentiated certain types of anxiety and suggested ways in which religion can provide methods to alleviate such unpleasant states. Jackson states that anxiety can take three different forms: ontological anxiety, guilt anxiety, and developmental anxiety. Ontological anxiety is related to having no meaning in life, along with a feeling of emptiness because of our ultimate finitude; it is the idea that we are not connected to God. Guilt anxiety tends to arise when we turn away from God because as human beings', continually embracing God's good graces is not always an easy task. Everyday life occurrences get in our way, which creates the difficult assignment of living up to God's standards. Consequently, we experience anxiety from this guilt. Developmental anxiety is the final kind of anxiety that Jackson discusses and this is experienced as we grow up, beginning with the separation from the mother at birth. This type of anxiety is experienced when we encounter uncertainty throughout our lifetime.

Jackson argues, although not empirically, that all three of these anxieties are connected and that the influence of the church can actually help to reduce the uneasy feeling experienced with these anxieties. For instance, the church offers inspiration and hope when the preacher gives his/her sermon. These words from the preacher allow people to feel a connection with God. This connection with God provides us with hope that there is meaning to life and our finitude is not necessarily the end due to the afterlife God will provide if we are connected. Furthermore, the church can be seen as a community that also provides people with a connection to fellow human beings. In times of despair, loneliness, etc. the church can serve as

a place to be with others with similar beliefs and problems. Again, this also can help alleviate the aforementioned anxieties because of the connectedness humans feel with other members of similar mindsets. Anxiety has been found to result in conservative social choices, or in preferences for others who are considered safe, comforting, or trustworthy (Henderson-King, 1994; Kenworthy & Jones, 2009a). For some individuals God may be seen as a comforting, safe social choice while others may prefer a close friend or family member (Jonas & Fischer, 2006). Although God and religion are not synonymous, God is seen as a supportive figure in most religions (Becker, 1973) and when experiencing anxiety those who find their religion comforting do so because of their faith and hope that God will hear their prayers and see them through the discomfort they feel.

The empirical literature regarding the relationship between trait anxiety and religion is very mixed (Shreve-Neiger & Eldelstein, 2004). Some studies have shown a negative relationship between religion and anxiety, such that individuals who are highly religious (i.e., as measured by church attendance) exhibit lower levels of anxiety (Hertsgaard & Light, 1984). Others have shown a positive relationship, whereby those who are more religious (self-report measures regarding church attendance, belief in a Supreme Being, soul immortality, religious morality, etc.) report higher levels of anxiety (Wilson & Miller, 1968). There is yet other research suggesting no relationship between anxiety and religion (Heintzelman & Fehr, 1976). Roundtree (2007) used Gorsuch and Venable's (1983) intrinsic/extrinsic-revised scale, and found that extrinsic (both personally and socially oriented) and intrinsic religious orientations were positively related to trait anxiety.

Gorsuch and Venable's (1983) intrinsic/extrinsic-revised scale measures the same orientations as Allport and Ross' religious orientation scale, but it differentiates extrinsic into two subcategories: extrinsic-personally oriented and extrinsic-socially oriented. The results of a recent survey (Kenworthy & Jones, 2009b) incorporating Allport and Ross' (1967) religious

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orientation scale (ROS; described below in "Religiosity research" section) and Spielberger, Gorsuch, and Lushene's (1967) situational and trait anxiety scale (a 20-item scale assessing situation and trait anxiety), found that those who were intrinsically religious had lower levels of trait anxiety while extrinsic religiosity was not related to trait anxiety. Shreve-Neiger and Eldelstein (2004) suggest some reasons for the discrepancy in the religion and anxiety literature, such as the different psychometric properties of religiosity measures, small sample sizes, dichotomizing high and low religious affiliation, operational definitions of anxiety and religion, self-report assessments of anxiety, and researchers inferring causation based on correlational research.

The literature has also been somewhat inconsistent regarding the relationship between trait death anxiety and religious orientation (Tomas-Sabado & Limonero, 2006). In Dezutter et al.'s (2009) study, they administered a survey that had a measure regarding different religious attitudes (Wulff's [1991] 33-item Post Critical Belief Scale) along with a death attitudes profile scale (Gesser, Wong, & Reker, 1987). These researchers found that the more religious the participants were, the higher acceptance of death they had. They were also more likely to believe in an afterlife. Harding, Flannelly, Weaver, and Costa (2005) also found that individuals who believed in God and an afterlife were also more accepting of death and exhibited less death anxiety than those who did not. Richardson, Berman, and Piwowarski (1983) found the same pattern, namely, the more religious an individual was the less anxious they were concerning their death.

Hui and Fung (2009) recruited a sample of Chinese university students to fill out questionnaires regarding their religiosity (Gorsuch & McPherson, 1989-I/E-R scale), a perceived purpose of life scale (Ryff, 1989), and a dying/death anxiety scale (Revised Collett-Lester Fear of Death and Dying scale). A lower death anxiety for their own death (and death of another person) was associated with higher intrinsic religiosity (Hui & Fung, 2009). Furthermore, using

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structural equation modeling, they found that having the perception of a purpose in life partially mediated the relationship between intrinsic religiosity and one's own death anxiety. In other words, the intrinsically religious participants who exhibited less death anxiety did so partially because they felt a sense of meaning and purpose in their lives. By contrast, Bolt (1977) found no relationship between an intrinsic religious orientation and death anxiety, while an extrinsic religious orientation was positively correlated with death anxiety.

Unfortunately, all of these studies have an immense drawback, in that they are all correlational. The findings can only suggest that there are sometimes significant relationships between religiosity and death anxiety. Furthermore, the aforementioned studies also measured trait anxiety or trait death anxiety but failed to address situational anxiety. In contrast, this study manipulated situational anxiety to assess its effects on preferred sources of support. The current experiment will also help elucidate how religion helps some individuals deal with thoughts of their mortality. Specifically, anxiety (and death anxiety) in this experiment will be manipulated along with a control condition in order to more accurately infer causality. This study also extended previous research findings by investigating how death anxiety influences religious (and non-religious) individuals' preferred source of support.

Religiosity Research

Religion has been related to alleviating general anxiety (Hertsgaard & Light, 1984), and has been associated with helping assuage thoughts of mortality (Hui & Fung, 2009), but it also is a prime motivator for many people's behaviors, thoughts, and feelings. Baumeister (1991) argues that human beings prefer to have meaning in their lives; he proposes that individuals have four needs that provide people with meaning: purpose, value (justification), efficacy, and self-worth. He further states that if an individual is lacking in any of these four needs, religion has the power to rid this deficiency, thereby providing meaning in life. Religion can be a very

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powerful tool for some individuals. Religion allows people to believe in something, provides a purpose for living, and gives a sense of belonging (Baumeister, 1991).

Allport and Ross (1967) created a religious orientation scale, which differentiates an intrinsic and extrinsic religious orientation. These authors devised this scale in order to understand an individual's religious commitment (i.e., how central religion is to the individual) or involvement with their religion versus behavioral tendencies (i.e., attending church). The literature at the time of the inception of their scale was very mixed regarding prejudice and religiosity. Some findings suggested that the less religious one is the less prejudiced attitudes he/she will have (Allport & Kramer, 1946), whereas others found that the more religious one is the more likely he/she will exhibit prejudiced attitudes (Kirkpatrick, 1949). Allport and Ross assumed that one reason for the discrepancy was how researchers were measuring religiosity. An intrinsically religious individual is one who truly lives by and identifies with their religious membership. These individuals base their life decisions on their religion and feel their religious involvement is very important. Extrinsic religious individuals tend to be a member of their religious group in order to avoid social ostracism and to live up to societal norms.

Intrinsic and extrinsic religiosities have been found to correlate with a variety of variables. For example, Allport and Ross (1967) found intrinsically oriented individuals were less prejudiced toward the mentally ill than were extrinsically oriented individuals. In the literature concerning altruism, highly intrinsic religious individuals were more motivated to help for egoistic goals (i.e., social and self-rewards) versus altruistic goals (i.e., to relieve the victims suffering; Batson & Flory, 1990). This is a surprising finding given that most research regarding intrinsic religiosity has positive outcomes, such as less prejudiced attitudes (Allport & Ross, 1967) and fewer depressive symptoms (Edmondson, Park, Chaudoir, & Wortmann, 2008). Batson, Floyd, Meyer, and Winner (2000), however, discovered that an intrinsic religious individual may help depending on the victim's group membership. They found that participants who were on the

high end of the intrinsic religiosity scale were less likely to help a homosexual in need than they were to help a heterosexual. The authors concluded that participants' willingness to help victims was dependent on the extent to which the victims' sexual orientation was a violation of ingroup norms and values (i.e., homosexuality violates heterosexuality norms and values).

In related research, Ryckman, Thornton, Borne, and Gold (2004) found that individuals exhibiting a strong social orientation were more willing to donate organs, while there was no relationship between willingness to donate an organ and religiosity for intrinsically religious individuals. On the flip side of altruistic behavior, aggression has also been investigated with regard to religious orientation (Leach, Berman, & Eubanks, 2008). Intrinsically religious individuals reported less aggression than the extrinsically oriented individuals did. With a behavioral measure of aggression (e.g., level of shocking a fictitious opponent in a competitive reaction-time game), however, there were no differences between religious orientations.

There have been many studies investigating the relationship between religious orientation, health outcomes, and psychological adjustment. A meta-analytic review regarding religiousness and depression showed a significant negative correlation between these variables, indicating that the more religious one is the fewer depressive symptoms one reports (Smith, McCullough, & Poll, 2003). Milevsky and Levitt (2004) used a sample of preadolescents and adolescents to examine their religious orientation and its relationship with their psychological adjustment (i.e., loneliness, self-esteem, and level of depression). Participants who were indiscriminately religious (i.e., high scores on both intrinsic and extrinsic orientation) exhibited less loneliness, higher self-esteem, and less depression than those who were indiscriminately non-religious (i.e., low scores on both intrinsic and extrinsic orientation). On the other end of the developmental continuum, Yohannes, Koeing, Baldwin, and Connolly (2008) examined participants' (60 years or older) depression levels and health behavior as a function of religious orientation. Intrinsic religiosity was again associated with less severe depression.

Donahue (1985) conducted a meta-analysis regarding intrinsic and extrinsic religiousness and other measures of religiousness, dogmatism, and fear of death. He found that intrinsic religiosity was highly correlated with other measures of religiousness, the perceived importance of one's religion, and commitment to the religion, whereas extrinsic religiosity was not. Intrinsic religiosity was also negatively correlated with the fear of death while extrinsic was positively correlated. Saroglou's (2002) meta-analysis investigated the relationship between religiosity (i.e., intrinsic and extrinsic) and personality constructs (i.e., The Big Five Personality Dimensions). An intrinsic religious orientation was most strongly correlated with Agreeableness and Conscientiousness, whereas high levels of Neuroticism were associated with an extrinsic religious orientation. Kenworthy and Jones (2009b), using The Big Five Personality dimensions, also found intrinsic religiosity to be positively correlated with Agreeableness and Conscientiousness and negatively correlated with trait anxiety, while extrinsic religiosity did not exhibit a relationship with any personality construct.

An intrinsic religious orientation has been investigated with a variety of different outcomes. This study connected this orientation (high vs. low intrinsic religious orientation) with anxiety (death anxiety), and trust in God and people. This study also attempted to differentiate certain preferred support systems (God support and social support) that people will engage in, depending on the level of intrinsic religiosity.

Preferred Sources of Support

Pargament et al. (1992) investigated the role of religious orientation and religious coping mechanisms when encountering negative life events. These researchers measured participants' religious orientation (i.e., intrinsic, extrinsic), asked them to describe the most grievous negative event that they had experienced in the previous year (e.g., illness, injuries, death of family members, divorce, termination from job) and to answer questions regarding religious coping strategies (e.g., God showed me how to deal with the situation) and non-

religious coping strategies (e.g., received support from friends). They found that an intrinsic religious orientation was most strongly associated with spiritual support (i.e., God showed me how to deal with the situation), while extrinsic orientation was associated with non-religious coping strategies (i.e., Tried not to think about it). This study expanded the previous research by experimentally manipulating anxiety to measure its effect on preferred source of support, depending on religious orientation. This experiment also further investigated what process variable may account for the relationship between religious orientation and choice of support. For some individuals (i.e., highly intrinsically oriented people) praying to God may seem comforting given the trust they have in God; on the other hand, for individuals who are not very religious (i.e., low intrinsically religious), social support may alleviate uncertainty due to the trust these people have in their friends and family.

Pargament et al. (1988) were interested in how religion can help individuals in their problem-solving abilities. These researchers asked the participants questions regarding how religious beliefs can be effective in their problem-solving strategies. They found three different God-related coping styles. The self-directing coping style involves God giving a person the ability to handle issues on his/her own. The deferring coping style requires God solely taking care of the problem. Finally, the collaborative coping style involves God working with a person to take care of any troubles. Intrinsic and extrinsic religious orientations were both positively correlated with the deferring and collaborative style and negatively correlated with the self-directing problem-solving style. These findings correlate well with this study, such that, exhibiting an intrinsic religious orientation is highly related to the idea that God will take care of things, or God will work with an individual to solve a certain issue and negatively correlated with the idea that God gives a person the ability to take care of matters. I am hypothesizing that those who are highly intrinsically religious should be more willing to turn to God, similar to Pargament et al.'s idea of a deferring or collaborative problem-solving style. Although this study

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does not focus on "coping mechanisms", the aforementioned studies illustrate the idea that certain individuals will prefer to receive support from religious methods (pray, faith, God), while others may prefer social support.

In a qualitative study, using a diverse population, Bhui, King, Dein, and O'Connor (2008) were interested in how people use religion and spirituality as strategies to cope. Participants were asked to provide an experience of distress and then they were asked ways in which they used to cope with the distressing situation. The researchers found that religious/spiritual coping (such as praying and talking to God) was the most commonly used strategy when individuals were having psychological difficulty. Further, the issues of religion and its importance were brought up many times in the participants' interviews with the experimenter. These researchers suggest that gaining a better understanding of religious coping may help those with mental distress in clinical settings. Within a religious Jewish population, God support (i.e., feeling appreciated by God and turning to God for advice) was related to better psychological functioning, and with less depression and anxiety (Lazar & Bjorck, 2008). Similarly, the findings of a recent study using terminally ill patients showed that patients who reported more religious comfort (i.e., feeling God's love and finding strength/comfort in their religion) exhibited fewer depressive symptoms and were also less concerned with their death (Edmondson, Park, Chaudoir, & Wortmann, 2008).

There is ample evidence suggesting that an individual's religious beliefs (believing in and praying to a higher power) can be seen as very comforting in times of need. As noted above, one of the principal aims of this study is to test the hypothesis that people with different levels of intrinsic religiosity will respond to an experimental manipulation of anxiety with different preferences of support. However, another goal is to show that these expected differences are mediated by different psychological pathways. It may be that religious individuals tend to trust God, whereas non-religious individuals trust friends and family. Therefore, trust is expected to

mediate the relationship between religious orientation and coping strategies, and will be discussed below.

Trust as a Mediator

According to Jones and George (1998), trust is a multidimensional construct – including moral, cognitive, and emotional elements – that, when adopted, can lead to a set of behavioral expectations among individuals (e.g., we trust that the accountant properly manages our money, we trust that the nanny will take care of our child, we trust our government is making the right decisions for us). To initiate trust, we depend on others to act in accordance with our expectations, in order to facilitate social interactions (Tschannen-Moran & Hoy, 2000). Trust can be placed in individuals, stemming from either their shared experiences or their reputation. Alternatively, group membership can serve as a heuristic cue to the trustworthiness of others. Rousseau, Sitkin, Burt, and Cramerer (1998) define trust as the willingness to accept vulnerability based upon positive expectations about another's behavior. Butler (1991) states that, in general, trust can exist between individuals, groups, or institutions, and can symbolize either a universal belief in humanity or a situation-specific or trustee-specific attitude.

Tschannen-Moran and Hoy (2000) propose, in their multidisciplinary review regarding trust, that trust has six different facets, including the willingness to risk vulnerability, confidence, benevolence, reliability, competence, openness, and honesty. All of these facets have been found in the many different operational definitions of trust. These facets of trust also apply in the relationship between a religious individual and God. In situations where people decide to trust, they subject themselves to being vulnerable to the actions of the other person (or God). God is seen to some people as the ultimate reliable, confident, open, competent, and honest source in any situation. To religious individuals, God is seen a the one entity that will protect, care for, not exploit, or take advantage of anyone because it is He who is forever there when needed (i.e., benevolence). Based on these premises, I propose that the trust that religious individuals have

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for God is one of the reasons why certain religious practices (e.g., praying to Him) help them through uncertain experiences (i.e., anxiety). Extant research regarding religion and anxiety has shown that religious individuals find it very comforting to have faith that God will see them through the unknown (Bhui et al., 2008; Jonas & Fischer, 2006; Pargament et al., 1992). However, what has not been asked, and what is pertinent in the current proposal, is what psychological processes are responsible for why religious practices are preferred for religious individuals. One answer to this question may be the trust they have in God.

Another missing link in the literature examining anxiety-provoking situations and support systems concerns people who score low on the intrinsic religiosity scale and methods they use to ameliorate such unpleasant states. Social support has been found, many times in psychological research (e.g., Joiner et al., 2009; McLaren, & Challis, 2009; Ruggiero et al., 2009), to be associated with less negativity in life (e.g., depression, illness). However, to my knowledge, social support has not been linked with the factors that I plan to investigate the present study (i.e., death anxiety, intrinsic religious orientation, and trust). Death anxiety has been manipulated previously (Greenberg et al., 1997; Norenzayan & Hansen, 2006) but not in the context of how different religious orientations can predict preferred sources of support. Those who score low on intrinsic religiosity will probably not turn to God in situations of uncertainty because, for them, He is not seen as a reliable resource to confide in. For those low on intrinsic religiosity, actual human beings (i.e., friends and/or family) may be seen as a more reliable means to improve uneasy feelings produced by anxiety-ridden situations. The reason why the low intrinsic individuals will seek out friends or family (vs. prayer or God) may be attributable to the trust they have in those individuals. Fellow human beings may be seen as the dependable, competent, open, and honest choice to feel comforted by in times of uncertainty. This study will seek to find out whether different levels of intrinsic religiosity predict different

support targets as a function of anxiety, and whether different sources of trust mediate those different relationships.

Overview and Hypotheses

Allport and Ross' (1967) religious orientation scale was administered to the participants in a pre-screening survey prior to the experiment. Once the experiment began, the participants were asked to complete a general trust measure (described below) and Gosling, Rentfrow, and Swann's (2003) Ten Item Personality Inventory, which is a condensed version of The Big Five Inventory. Then, to produce an anxious emotional state, participants were randomly assigned to one of three experimental conditions (Uncertainty: mortality salience, anxiety, and control). They then filled out an emotion checklist questionnaire followed by a trust questionnaire (i.e., trust in friends/family or in God). Finally, participants filled out a social, God, and self support questionnaire.

Hypothesis 1: I hypothesized that the mortality salience condition (versus anxiety and control) would lead to the highest level of preference for support by God, but only at high levels of intrinsic religiosity (+1 SD).

Hypothesis 2: I also predicted that the mortality salience condition (versus anxiety and control) would lead to the highest level of preference for social support, but only at low levels of intrinsic religiosity (-1 SD).

The rationale for hypothesis 1 was that terror management theory (Greenberg et al., 1997) predicts that those faced with mortality will protect their cultural worldviews. Religion is part of one's cultural worldview; therefore, a highly intrinsically religious person (+1SD) would want to receive support from their faith, prayer when faced with mortality. An additional basis for this prediction was that Jonas and Fischer (2006) found a positive relationship between intrinsic religiosity and belief in God as a coping strategy. When Jonas and Fischer (2006) asked if "talking to other people about the danger of terrorist attacks" is an effective strategy, highly

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intrinsic religious individuals did not find this method as satisfying. This led me to expect that social support might not be comforting enough for highly religious people when faced with uncertainty. Jones and Kenworthy's (2008) findings also led to this prediction because, in that study, those who highly identified with their religious group trusted other religious members less when faced with anxiety. Pargament et al. (1992) also found an intrinsic orientation to be positively correlated with spiritual strategies.

The rationale for hypothesis 2 was also derived from a terror management theory (Greenberg et al., 1997) perspective. It predicts that those faced with mortality will protect cultural worldviews. If religion is not a part of one's culture worldview (i.e., those scoring low on the intrinsic religiosity scale) then "religious support" will not be beneficial for these individuals when faced with their mortality. Jones and Kenworthy's (2008) findings also led me to this hypothesis because individuals who did not identify with their religious group tended to trust other people more when faced with anxiety. Therefore, I expected that those who are not very religious would prefer social support to support from faith, prayer, or God.

Hypothesis 3: I hypothesized that the mortality salience condition (versus anxiety and control) would lead to the highest level of preference for current support by God, but only at high levels of intrinsic religiosity (+1 SD).

Hypothesis 4: I also expected that the mortality salience condition (versus anxiety and control) would lead to the highest level of preference for current social support, but only at low levels of intrinsic religiosity (-1 SD).

Hypothesis 5: I predicted that the effect of mortality salience on preference for support by God should be mediated through a trust in God for those who are highly intrinsically religious (+1 SD).

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Hypothesis 6: I hypothesized that the effect of mortality salience on preference for social support would be mediated through trust in friends/family (i.e., social trust) for those who are less intrinsically religious (-1 SD).

The rationale for hypotheses 5 and 6 is based on logic, reason, and my previous research on trust (Jones & Kenworthy, 2008). One of the reasons why an intrinsic religious individual may prefer support from God is due to the trust they have in God. On the other hand, one of the reasons why a less religious individual (low intrinsic religiosity) would prefer to have social support is due to the trust they have in an individual (be it a mother, friend, etc.). Furthermore, a factor analytic test of these constructs indicated that intrinsic religiosity and trust in God are independent constructs (i.e., they were shown to load on separate factors). It makes sense that you would want support from God or friends and family, depending on your level of religious orientation (see above hypotheses). Additionally, one of the reasons why people are expected to prefer social or spiritual support would be due to the trust they have in their social network (friends/family) or spiritual network (God, faith, prayer).

CHAPTER 2

METHOD

Participants and Design

One hundred eighty students (39 men, 141 women) participated in this experiment. These participants were enrolled in psychology courses at The University of Texas at Arlington and participated in this experiment for course credit. One participant was excluded due to his/her lack of response on the religious orientation premeasure, leaving 179 participants in the analyses. The participants were recruited to sessions of 30-minute intervals in groups of up to a maximum of four. All participants were given the verbal instructions and completed the informed consent process as a group in the main lab area and then were seated in separate rooms by themselves while completing all experimental procedures. There were no significant differences for preference for general social support ($p = .61$), preference for general self-support ($p = .80$), preference for current social support ($p = .60$), preference for current support by God ($p = .12$), and preference for current self-support ($p = .24$) with regard to participants being instructed in groups of four ($n = 94$), three ($n = 47$), two ($n = 17$), or alone ($n = 22$). However, preference for general support by God did seem to differ depending on session size, $F(3, 178) = 4.01$, $p < .05$, $\eta^2 = .06$. Post-hoc analyses revealed that participants who were told the instructions in groups of three preferred more support by God ($M = 7.36$ $SE = .30$) than those in groups of four ($M = 6.23$ $SE = .21$). I believe this effect occurred by chance due to all other dependent variables being unaffected by how many individuals were there while the instruction was given. However, I did control for session size in any analyses regarding preference for general support by God. One research assistant helped to collect the data, and there were no significant differences between her and me with regard to preference for general support by God ($p = .44$), preference for general social support ($p = .11$), preference for general self-support ($p = .32$), preference for

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current social support ($p = .40$), preference for current support by God ($p = .50$), and preference for current self-support ($p = .60$).

All participants were randomly assigned to one of three conditions: mortality salience, anxiety, or control. Randomly assigning the participants into the three different conditions did reduce the likelihood that pre-existing variables (i.e., demographic variables, personality) would be confounded with the experimental conditions. There were no significant between-condition differences in the participants' age ($p = .99$), gender ($p = 1.00$), intrinsic religious orientation ($p = .10$), openness ($p = .78$), conscientiousness ($p = .88$), extraversion ($p = .72$), agreeableness ($p = .34$), or neuroticism ($p = .71$). The participants' ethnicity was evenly distributed across conditions, $\chi^2(8) = 3.58$, $p = .89$.

Procedure

Upon arrival to the laboratory, participants were told that the purpose of the study was to understand how religiosity and personality are related to trusting styles and support systems. They were told that the researcher was trying to develop a projective personality assessment and to be detailed, open, and honest with their responses to the open-ended questions. They were also instructed to answer the experimental packet in the order that it was presented to them. The first items on the questionnaire that the participants answered were a general trust measure (described below) that provided a baseline level of trust. The next items included the Ten Item Personality Inventory in order to assess the Big Five personality dimensions, which were included to help support the cover story.

Following these items were the mortality salience, anxiety, or control manipulations, ostensibly for the development of a new projective personality assessment. The participants in the mortality salience condition were asked to write down which emotions are evoked as a result of their imagined death and what they believe will happen to them as they physically die.

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The participants in the anxiety condition were given the same questions as the mortality salience manipulation but it would specifically target dental pain. This anxiety condition was added to test the proposition that mortality salience elicits different reactions than a typical anxiety-provoking experience. Manipulation checks used in previous research have shown that mortality salience and non-death anxiety manipulations both tend to elicit the same reported emotions according to manipulation checks, yet produce disparate outcomes on key measures (see Greenberg et al., 1995). The participants in the control condition also had the same questions but with regard to their reactions to a typical Monday.

Previous literature regarding mortality salience has shown its effects to be more robust after a brief (3-minute) delay (Greenberg et al., 1994), as opposed to immediately. The rationale for a delay is that when individuals contemplate their own death, it generates feelings that are the strongest when those thoughts are not consciously being processed. Therefore, participants were asked to answer a brief emotional check questionnaire (described below). Following this emotion check, participants then answered questions measuring their levels of trust in God and in their friends/family. The participants answered questions regarding the support they generally like to receive (i.e., God, friends/family, self) along with nine items assessing their preferences at that moment (social, spiritual, or self-reliance).

Materials

General trust. Three general trust items were taken from Brehm and Rahn (1997; see also Hewstone, Cairns, Voci, Hamberger, & Niens, 2006; Kenworthy & Jones, 2009a). The items were: "Do you think most people would try to take advantage of you if they got a chance, or would they try to be fair?", "Would you say that most of the time people try to be helpful, or that they are mostly just looking out for themselves?", and "Would you say that most people can be trusted or that you can't be too careful with them?". Three general trust items were used to

measure a general trust in others. These three correlated items were averaged into an index of general trust in others (Cronbach's α = .32). This 3-item scale has been similarly unreliable in previous research. For example, in Jones (2008), this scale produced an alpha of .40. This may seem like a non-reliable scale, but Cortina (1993) provides a discussion regarding the degree to which alphas can be influenced by the number of items, and Bernardi (1994) discusses the various cases in which a scale with a low alpha can still be retained as a valid scale.

Briggs and Cheek (1986) argue that because Cronbach's alpha simply estimates the degree to which the items in a scale are similar (by comparing their score to a hypothetical scale), this coefficient may not actually reflect the scale's true reliability. The authors, therefore, suggest that by taking the correlations of the items and averaging them together, a true estimation of their similarity can be detected. Another advantage of using this method is that it is not influenced by number of items on the scale. Briggs and Cheek argue that this method is a clearer measure of how similar the items are when using scales with a small number of items (such as this one). In the current study, the inter-item correlations ranged from .05 to .23, and averaged out to a reliability coefficient of .14.

Intrinsic and Extrinsic Religious Orientation Scale. Allport and Ross (1967) developed this scale in order to assess religious orientation. This is a 9-item scale that was rated on a 7-point scale ranging from 1 (*I strongly disagree*) to 7 (*I strongly agree*). A higher score on the intrinsic scale represented a stronger intrinsic orientation (see Appendix A). The nine items used to target intrinsic religion were highly reliable (Cronbach's α = .90). These items were averaged to form an index of intrinsic religious orientation.

The Ten Item Personality Inventory. Gosling, Rentfrow, and Swann (2003) created the Ten Item Personality Inventory to serve as a condensed version of The Big Five Inventory. Their 10-item scale was used to assess participants' level of agreeableness, extraversion, neuroticism, conscientiousness, and openness to experience. Each personality trait consisted of

two items, which were rated on 5-point scales ranging from 1 (*I strongly disagree*) to 5 (*I strongly agree*). The scores for the five personality dimensions were summed after any negatively-worded statements were reverse-coded. Higher scores on each dimension indicated higher levels of the trait in question (extraversion, agreeableness, conscientiousness, neuroticism, and openness; see Appendix B). The correlations between the two items for each of the respective personality dimensions were: $r_{extraversion}$ (179) = .46, $p < .01$, $r_{agreeableness}$ (179) = .38, $p < .01$, $r_{conscientiousness}$ (179) = .41, $p < .01$, $r_{neuroticism}$ (179) = .57, $p < .01$, and $r_{openness}$ (179) = .34, $p < .01$.

Mortality Salience. Manipulating mortality salience is the vehicle for inducing death-anxiety in the terror management literature (Greenberg et al., 1990; Greenberg et al., 1997; Jonas & Fischer, 2006; Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989; Schmeichel & Martens, 2005). Participants were asked two open-ended questions regarding their death. The first question asked them to describe the emotions they feel while contemplating their own death. They also wrote about what they think will happen to them physically as they die. The anxiety condition had the same two open-ended questions as the mortality salience condition, only substituting death with experiencing "dental pain." The control condition had the same two open ended questions as the mortality salience and anxiety conditions, but substituting death and dental pain with "a typical Monday."

Emotion Check. Following the anxiety manipulations, a 14-item emotion questionnaire was given in order to assess the participants' emotions. These items were assessed on 7-point scales (*1 = not at all; 7 = very much*) and included the following emotions: happy, anxious, cheerful, tense, depressed, nervous, irritated, angry, worried, sad, agitated, indifferent, pleasant, and furious (see Appendix C). The four anxious items (*worried, anxious, tense, nervous*) and the two sad items (*sad, depressed*) loaded on one factor (see Appendix D). These items were reliably intercorrelated (α = .87) and thus averaged into a negative emotion

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index.[1] The four angry items (*irritated, angry, agitated, furious*) were also reliably intercorrelated (α = .85), and were averaged into an anger emotion index. Finally, the three positive items *(happy, cheerful, pleasant)* were reliably intercorrelated (α = .88) and were averaged into a positive emotion index. These three constructs did in fact load onto separate factors, according to the results of a varimax factor rotation. There were three eigenvalues greater than one, and these factors accounted for 65.70% of the variance (see Appendix D).

Trust

      Trust in God. The items that were used to assess participants' level of trust in God were developed by the investigator. These items were rated on 9-point scales (1-*never*, 3-*sometimes*, 5-*most the time,* 7-*almost always*, 9-*always*). The items were: "I put all of my trust in God"; "I see God as the most trustworthy being in my life."; "When I need guidance I trust that God will help me choose the right decision."; "God is the entity in my life that I trust most."; "I trust that God will help guide me through any problems that I encounter in life." A higher score on this scale indicated a higher level of trust in God. In this study, the term "God" was referred to as any higher power deity depending upon the individual's personal religious belief. This was stated on the questionnaire and then verbally reinforced by the researcher. The five items used to assess trust in God were reliably intercorrelated (α = .97). These items were thus combined to create an index of trust in God.

      Trust in Friends/Family. The items that were used to assess the participant's level of trust in members of a social group were also developed by the investigator. These items were rated on 9-point scales (1-*never*, 3-*sometimes*, 5-*most the time,* 7-*almost always*, 9-*always*). The items were: "I put all of my trust into my friends and/or family."; "I see my friends and/or family as the most trustworthy people in my life."; "When I need guidance I trust that my friends and/or family will help me choose the right decision."; "Friends and/or family are the individuals that I trust most."; "I trust that friends and/or family will help guide me through any problems that

I encounter in life.". A higher score on this scale is indicative of a higher level of trust in friends and/or family. The five items used to assess a trust in people were highly reliable (α = .94). These items were also combined into an index of social trust. Trust in God and social trust did load onto separate factors, according to the results of a varimax factor rotation. There were two eigenvalues greater than one and accounted for 85.72% of the variance (see Appendix E).

General Social Support, God Support, and Self-Support. Participants were asked to rate, on 9-point scales (1-never, 3-sometimes, 5-most the time, 7-almost always, 9-always), the extent to which the item describes something they would typically do. These items, adapted from Carver, Scheier, and Weintraub (1989), were used to measure different sources of support. The items that were used to assess preferences for social support were: "I talk to friends or family members about how I feel."; "I try to get emotional support from friends or family members."; "I look to friends and/or family members to help me when I am in need."; "I discuss my feelings with friends or family members."; "I get sympathy and understanding from friends or family members.".

Items that were used to assess a preference for support by God were: "I seek God's help."; "I put my faith in God."; "I try to find comfort in my religion."; "I pray more than usual."; "I look to prayer and faith when I am in need.". The items used to assess self-support were: "I tend to rely on myself."; "I try to get emotional support from within myself."; "I usually look within myself for comfort."; "I am the only person who I can count on."; "I tend to be very self-reliant.".

The five items that assessed social support were highly reliable (α = .92), these items were averaged into an index of social support. The five items that assessed spiritual support were also highly reliable (α = .91) and were combined into an index of preference for support by God. There were an additional five items used to assess self-support and these items were reliably intercorrelated (α = .85). These five items were combined into a self-support index. These three constructs did load onto separate factors, according to varimax factor rotation.

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There were three eigenvalues greater than one, and accounted for 71.50% of the variance (see Appendix F).

       Current Social Support, God Support, and Self-Support. As noted above, there were also additional items which asked participants to indicate how much they would prefer to have current support by God, and these items were: "At the present moment, how strongly would you prefer to be in communion with God?"; "At the present moment, how strongly would you prefer to be praying/talking to God?"; "At the present moment, how strongly would you prefer to consult with God?".

       Items used to assess preference for current social support were: "At the present moment, how strongly would you prefer to be with friends and family?"; "At the present moment, how strongly would you prefer to be in a social setting?"; "At the present moment, how strongly would you prefer to be around others?".

       Items used to assess preference for current self-support were: "At the present moment, how strongly would you prefer to engage in self-reflection?"; "At the present moment, how strongly would you prefer to keep to yourself?"; "At the present moment, how strongly would you prefer to have some alone time?".

       These items were rated on 9-point scales ranging from 1 (*not at all*) to 9 (*very much).* The three items per support source preference were reliable (social α = .80, God α = .95, self-support α = .65). There were three indices created regarding the respective current preferences for social support, God support, and self-support. These three constructs did load onto separate factors, according to varimax factor rotation. There were three eigenvalues greater than one and accounted for 76.40% of the variance (see Appendix G).

CHAPTER 3

RESULTS

Mood Checks and Preliminary Analyses. I conducted a series of analysis of variance (ANOVA) tests using the experimental condition (mortality salience, anxiety, and control) as the independent variable and the four moods (anger, negative mood, happy) as the dependent variables. There were no significant differences between mortality salience, anxiety, and control for happiness, $F(2, 177) = 1.30$, $p = .28$, $\eta^2 = .02$. However there were significant differences between conditions with regard to anger, $F(2, 177) = 4.11$, $p < .05$, $\eta^2 = .05$, and negative mood, $F(2, 177) = 6.91$, $p < .05$, $\eta^2 = .07$. Post-hoc analyses revealed that participants in the control condition seemed to be more angry ($M = 2.03$ $SD = 1.03$) versus the anxiety condition ($M = 1.52$ $SD = 1.02$) and the mortality salience condition ($M = 1.58$ $SD = 1.08$). Although the varimax rotation indicated the emotional items *anxious, nervous, tense, worry, sad, and depressed* loaded on one factor, I ran additional analyses using only the anxiety items (*anxious, nervous, tense, worry*) or only sad items (*sad, depressed*). The anxiety items were reliably intercorrelated ($\alpha = .86$), as were the sad items ($\alpha = .83$).

The participants were also more negative ($M = 3.00$ $SD = 1.34$) in the control condition than those in the anxiety condition ($M = 2.28$ $SD = 1.18$) and the mortality salience condition ($M = 2.23$ $SD = 1.19$). I conducted a series of analysis of variance (ANOVA) tests using the experimental condition (mortality salience, anxiety, and control) as the independent variable and these two moods (anxiety and sadness) as the dependent variables. There were significant differences between conditions with regard to anxiety, $F(2, 177) = 6.99$, $p < .05$, $\eta^2 = .07$ and sadness, $F(2, 177) = 3.41$, $p < .05$, $\eta^2 = .04$. Post-hoc analyses revealed that participants in the control condition seemed to be more anxious ($M = 3.31$, $SD = 1.43$) than were those in the anxiety condition ($M = 2.52$, $SD = 1.40$) and the mortality salience condition ($M = 2.41$, $SD =$

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.36). The participants were also more sad in the control condition (*M* = 2.40, *SD* = 1.55) than in the anxiety condition (*M* = 1.80, *SD* = 1.11) and the mortality salience condition (*M* = 1.88, *SD* = 1.25).

These findings are typical in the terror management literature, such that, researchers do not find differences between their anxiety condition (which is usually a control condition when using a mortality salience manipulation) and mortality salience condition mood checks. Researchers find significant differences in their key outcome measures but not in the mood checks (see Greenberg et al., 1997). However, I find it odd that participants in the control condition seemed to have exhibited more anger and negative mood. I assume Monday morning elicited more emotion in this sample of participants. Using only college-aged students may have created more negative emotion with regard to Monday. Future research should maybe use another day of the week for a control condition than a Monday. Note also that typical mortality salience experiments do not include a control condition such as the one employed in the present design, but instead compare only mortality salience and non-death related anxiety conditions.

I found no effects of experimental condition on any type of preferred support (see Table 1 for means and standard deviations of key outcome variables as a function of experimental condition). Below, I report the results of the hypothesis tests, which were conducted using regression analyses.

Table 3.1 Means (SD) between condition and type of support

	Mortality Salience	Anxiety	Control
General Social Support	6.59 (1.74)	6.49 (1.87)	6.75 (1.73)
General God Support	6.25 (2.12)	6.96 (2.00)	6.55 (2.17)
General Self Support	5.21 (1.80)	5.36 (1.64)	4.76 (1.67)
Current Social Support	6.27 (1.43)	6.40 (1.86)	6.40 (1.59)
Current God Support	5.82 (2.38)	6.43 (2.28)	6.11 (2.44)
Current Self Support	4.73 (1.37)	5.23 (1.87)	5.22 (1.78)

Regression Analyses: Hypotheses 1 and 2

Hypothesis 1: I hypothesized that the mortality salience condition (versus anxiety and control) would lead to the highest level of preference for support by God, but only at high levels of intrinsic religiosity (+1 SD).

Hypothesis 2: I also predicted that the mortality salience condition (versus anxiety and control) would lead to the highest level of preference for social support, but only at low levels of intrinsic religiosity (-1 SD).

In order to analyze hypotheses 1 and 2, I used moderated regression analyses (Aiken & West, 1991). I ran multiple regression analyses using mortality salience (versus anxiety and control), intrinsic religiosity, and their interactions (mortality salience X intrinsic religiosity) as predictors, and God, social, self-support as the respective criterion variables. For the overall model, unweighted effect codes were used. Dummy coding was used for testing pair-wise differences where significant effects were found. I then ran regression analyses with the appropriate interaction terms and predictor variables. Multiple models were tested and the effects were assessed sequentially to determine the influence of a given variable above and beyond all others in a model.

Preference for General Support by God Support

A preference for general support by God refers to the questions participants received regarding the extent to which they generally prefer to have support from God. There was a no significant main effect of experimental condition on preference for support by God, ΔF(2, 172) = 1.45, p = .23, ΔR^2 = .00. There was a main effect of intrinsic religiosity on the preference for general support by God, t(178) = 13.83, b = 1.19, p < .05, sr^2 = .51, such that the higher the participants' level of intrinsic religiosity, the more they reported a preference for general support by God. There was a marginally significant interaction between experimental condition and intrinsic religiosity in predicting preferences for general support by God, ΔF(2, 172) = 2.47, p = .09, ΔR^2 = .01. Simple slopes analyses then showed a significant effect of intrinsic religiosity on general support by God in the mortality salience condition, t(178) = 6.65, b = .942, p < .05, sr^2 = .12, in the anxiety condition, t(178) = 7.99, b = 1.32, p < .05, sr^2 = .17, and in the control condition, t(178) = 9.29, b = 1.31, p < .05, sr^2 = .23. Although intrinsic religiosity predicted general support by God in all three conditions, the effect of intrinsic religiosity was slightly stronger (although not significantly) in the anxiety condition (see Figure 1). It also seems that participants in the mortality salience condition all increased their general preference for support by God regardless of their intrinsic religious orientation. It may be that the highly religious individuals tend to always use God as a general support system; however, the low intrinsic orientation participants may have increased their need for general God support due to the thought of their demise.
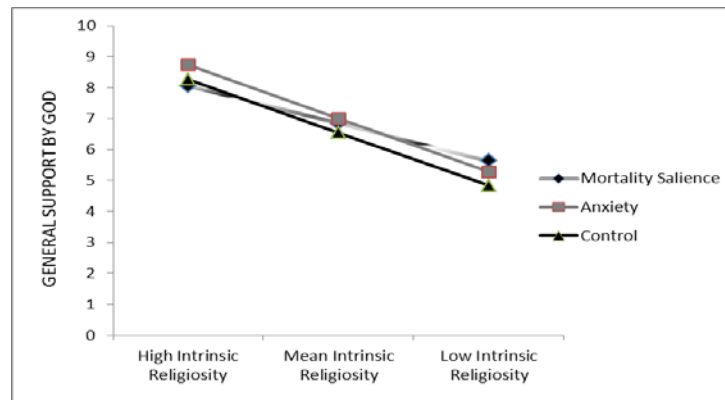
Figure 3.1 God support as a function of religious orientation and anxiety.

Preference for General Self Support

There was no main effect of condition on preferences for general self-support, $\Delta F(2, 173) = 1.93$, $p = .15$, $\Delta R^2 = .02$. There was a significant main effect of intrinsic religiosity on the preference for self-support, $t(178) = -5.01$, $b = -.474$, $p < .05$, $sr^2 = .12$, such that the higher the participants' level of intrinsic religiosity, the less they preferred relying on themselves. There was no significant interaction of condition and intrinsic religiosity on the preference for self-support, $\Delta F(2, 173) = .07$, $p = .93$, $\Delta R^2 = .00$.

Preference for General Social Support

There was no main effect of condition on preferences for general social support, $\Delta F(2, 173) = .44$, $p = .65$, $\Delta R^2 = .01$. There was no main effect of intrinsic religiosity on the general preference for social support, $t(178) = .905$, $b = .096$, $p = .37$, $sr^2 = .00$. There was no significant interaction of condition and intrinsic religiosity on the general preference for social support, $\Delta F(2, 173) = 1.06$, $p = .35$, $\Delta R^2 = .01$.

Regression Analyses: Hypotheses 3 and 4

Hypothesis 3: I hypothesized that the mortality salience condition (versus anxiety and control) would lead to the highest level of preference for current support by God, but only at high levels of intrinsic religiosity (+1 SD).

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Hypothesis 4: I also expected that the mortality salience condition (versus anxiety and control) would lead to the highest level of preference for current social support, but only at low levels of intrinsic religiosity (-1 SD).

To test these hypotheses, I again used moderated regression analyses (Aiken & West, 1991). I conducted the regression analyses using mortality salience (versus anxiety and control), intrinsic religiosity, and their interaction (mortality salience X intrinsic religiosity) as predictors and the participants' current preference of support (i.e., by God, social, and self) as the respective criterion variables. Again, for the overall model, unweighted effect codes were used in order to test the effect towards the grand mean. If there was a significant effect, I then used the dummy codes in order to investigate differences between the mortality salience, anxiety, and control conditions for the aforementioned criterion variables. I then conducted regressions with the appropriate interaction term and the criterion variables.

Preference for Current God support

There was no main effect of condition on preferences for current support by God, $\Delta F(2, 173) = .535$, $p = .58$, $\Delta R^2 = .00$. There was a main effect of intrinsic religiosity on the preference for current support by God, $t(178) = 9.55$, $b = 1.09$, $p < .05$, $sr^2 = .34$, such that the higher the participants' level of intrinsic religiosity, the more they reported a preference for current support by God. There was no interaction of condition and intrinsic religiosity on the preference for current support by God, $\Delta F(2, 173) = .429$, $p = .65$, $\Delta R^2 = .00$.

Preference for Current Self Support

There was no main effect of condition on the preference for current self-support, $\Delta F(2, 173) = 2.15$, $p = .13$, $\Delta R^2 = .02$. There was a marginally significant main effect of intrinsic religiosity on the preference for current self-support, $t(178) = -1.69$, $b = -.168$, $p = .09$, $sr^2 = .02$, such that the higher the participants' level of intrinsic religiosity, the less they preferred

currently relying on themselves. There was no significant interaction of condition and intrinsic religiosity on the preference for current self-support, $\Delta F(2, 173) = .826$, $p = .44$, $\Delta R^2 = .00$.

 Preference for Current Social Support

There was no main effect of condition on the preference for current social support, $\Delta F(2, 173) = .013$, $p = .98$, $\Delta R^2 = .00$. There was a marginally significant main effect of intrinsic religiosity on the preference for current social support, $t(178) = 1.82$, $b = .176$, $p = .07$, $sr^2 = .02$, such that as intrinsic religiosity increased, so too did preferences for current social support. There was no significant interaction of condition and intrinsic religiosity in predicting the preference for current social support, $\Delta F(2, 173) = .115$, $p = .89$, $\Delta R^2 = .00$.

Tests of Mediation: Hypotheses 5 and 6

Hypothesis 5: I predicted that the effect of mortality salience on preference for support by God should be mediated through a trust in God for those who are highly intrinsically religious (+1 SD).

Hypothesis 6: I hypothesized that the effect of mortality salience on preference for social support would be mediated through trust in friends/family (i.e., social trust) for those who are less intrinsically religious (-1 SD).

To analyze Hypotheses 5 and 6, I used moderated meditational analyses (Baron & Kenny, 1986; Preacher, Rucker, & Hayes, 2007). I used a moderated mediation macro from Hayes' (n.d.) website in order to run these analyses. I split the data into three different files (e.g., one file with the mortality salience vs. control ($n = 113$); mortality salience vs. anxiety ($n = 124$); and anxiety vs. control ($n = 119$)) in order to use the aforementioned macro to detect moderated mediation. The results reported below constitute tests of the predictions that intrinsic religiosity would moderate both paths between condition to trust and trust to support preferences. I tested the moderated effect of intrinsic religiosity on the paths separately (e.g.,

Preacher et al.'s, 2007 model 2 and model 3), and found no significant moderated mediation effects.

Trust in God did not significantly mediate the path between conditions and the general preference for support by God for the mortality salience versus control dataset. Intrinsic religiosity did not significantly moderate the predicted model's paths (i.e., condition to God trust, nor God trust to general preference for support by God). The mediator model did not differ depending on the different levels of religiosity. Trusting friends and family did not mediate the path between conditions and the general preference for social support. Intrinsic religiosity did not significantly moderate the predicted model's paths (i.e., condition to social trust, nor social trust to general social support). The mediator model did not differ depending on the level of intrinsic religiosity. Trusting God did not mediate the path between conditions and preference for current support by God. In addition, the levels of intrinsic religiosity did not significantly moderate the predicted model's paths (i.e., condition to God trust, nor God trust to preference for current support by God). The mediator model did not differ depending on the level of intrinsic religiosity. Finally, social trust did not mediate the path between condition and preference for current social support. Intrinsic religiosity did not moderate the predicted model's paths (i.e., condition to social trust, nor social trust to preference for current social support). The mediator model did not differ depending on the level of intrinsic religiosity. God trust did not mediate the path between condition and the general preference for support by God for the mortality salience versus anxiety dataset. Intrinsic religiosity did not moderate the predicted model's paths (i.e., condition to God trust, nor God trust to the general preference for support by God). The mediator model did not differ depending on the different levels of intrinsic religiosity. In this model (see Figure 7), the conditional indirect effect of social trust was significant at the mean level. Although this was significant, it may simply be due to the lower amount of error associated with intrinsic religiosity at the meal level. The conditional indirect effects were all very similar in

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magnitude. Participants in the anxiety condition (versus mortality salience) exhibited more trust in friends and family. Participants in the mortality salience condition (versus anxiety) preferred more general social support. This was a statistically significant finding using conventional probability levels (i.e., $p < .05$). However, there were multiple models that were tested in this experiment. For example, for the death anxiety versus anxiety condition a total of 12 models were analyzed. I conducted many analyses and produced different models, but each analysis that I conducted had an a priori hypothesis before statistical tests were run. I did use the Bonferroni alpha level adjustment. In a Bonferroni alpha level adjustment, the standard p-value (.05) was divided by the amount of tests run (e.g., .05/12 = .004). Therefore, this model would not be significant after correcting the alpha level in order to find a true significant effect versus an effect found by chance. This is also true for the findings regarding mortality salience versus anxiety and a preference for general social support.

God trust did not mediate the path between condition and preference for current support by God. Intrinsic religiosity did not significantly moderate the predicted model's paths (i.e., condition to God trust, nor God trust to preference for current support by God). The mediator model did not differ depending on the level of intrinsic religiosity. Finally, social trust did not mediate the path between condition and preference for current social support. Intrinsic religiosity did not moderate the predicted model's paths (i.e., condition to social trust, nor social trust to preference for current social support). The mediator model did not differ depending on the level of intrinsic religiosity. There were no predictions regarding any differences between the anxiety condition versus the control condition. The same models described above (e.g., experimental condition leading to support via trust depending on level of intrinsic religiosity) were tested using this data set and yielded no significant results.

Supplementary Analyses. I excluded those below the median on anxiety in both the mortality salience and dental pain conditions in order to test for differences on the key measures

between these conditions for those participants who were anxious. I found no significant differences in general social support ($p = .40$), general self-support ($p = .29$), current social support ($p = .89$), and current self-support ($p = .27$). I did find interaction (intrinsic religiosity and condition) for general support by God, $\Delta F(1, 60) = 5.53$, $p < .05$, $\Delta R^2 = .04$, and current support by God, $\Delta F(1,61) = 5.09$, $p < .05$, $\Delta R^2 = .05$. Simple slopes analyses then showed a significant effect of intrinsic religiosity on general support by God in the mortality salience condition, $t(60) = 6.95$, $b = .942$, $p < .05$, $sr^2 = .37$ and in the anxiety condition, $t(60) = 7.70$, $b = 1.32$, $p < .05$, $sr^2 = .45$. Simple slope analyses also showed a significant effect of intrinsic religiosity on current support by God in the mortality salience condition, $t(61) = 5.41$, $b = 1.388$, $p < .05$, $sr^2 = .30$ and in the anxiety condition, $t(61) = 5.59$, $b = 1.32$, $p < .05$, $sr^2 = .32$. Figure 2 and 3 below depict the simple slope of mortality salience and anxiety and high, mean, and low levels of intrinsic religiosity on general support by God (Figure 2) and current support by God (Figure 3). Although intrinsic religiosity predicted general and current support by God in both conditions, the effect of intrinsic religiosity was slightly stronger in the anxiety condition. This is the same pattern that was found using the entire sample (not excluding those with low levels of anxiety).
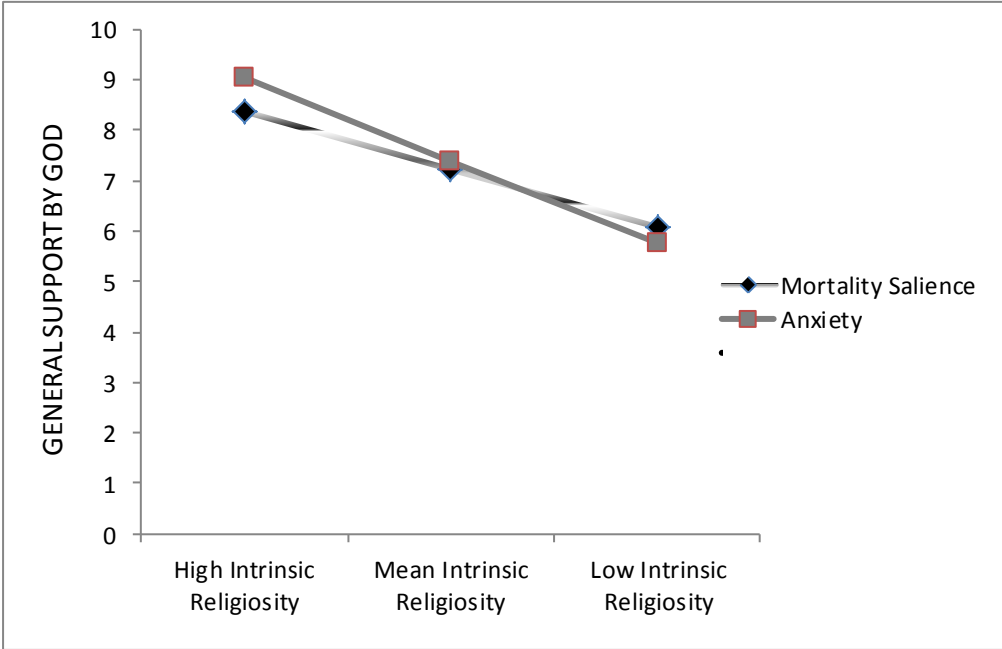
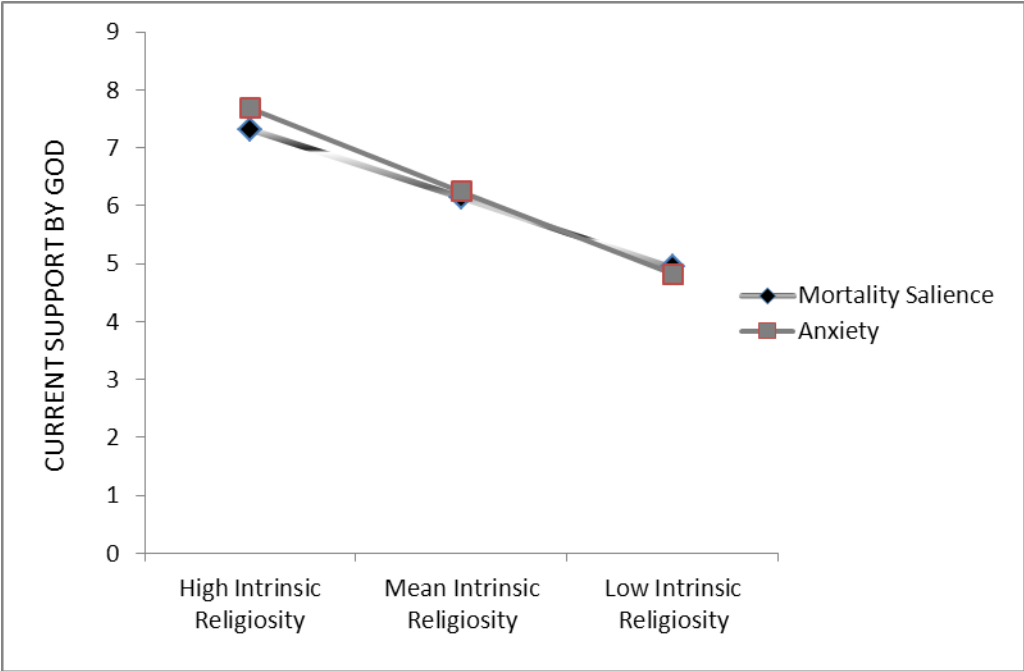Figure 3.2. General God support as function of religiousness and anxiety

Figure 3.3. Current God support as function of religiousness and anxiety

CHAPTER 4

DISCUSSION

The purpose of this study was to see how religious orientation and mortality salience would influence individuals' choices in sources of support (social vs. spiritual) when thinking about their death. To my knowledge, this was the first laboratory experiment to combine mortality salience, intrinsic religiosity, and choice of preferred support (i.e., God or people). Previous research regarding terror management theory has been primarily correlational and has not shown the effects of one's contemplation of death on choice of preferred support in a true experiment. It was expected that the mortality salience condition would enhance the tendency to exhibit a preference for support by God, especially for intrinsically religious individuals. This hypothesis was not supported by the current data. Individuals exhibiting low levels of intrinsic religiousness were expected to prefer to receive support from friends or family in the mortality salience condition. This hypothesis was not supported by the data.

I further hypothesized that trust in God would account for the relationship between death anxiety and support by God. Additionally, I predicted that trust in friends/family would mediate the relationship between death anxiety and social support. These hypotheses were not supported. Trust did not mediate the relationship between death anxiety and preferred source of support.[4] Although null findings are generally not explored, one possible explanation for the lack of mediation might be the lack of strong mortality salience effects in the first place. If there is little variance to be accounted for to begin with, then moderated mediation will be harder to detect. Alternatively, the link between mortality salience and support choice might be conceptualized as a direct, unmediated link. In other words, there need not be an intermediate process to account for the effect, should one emerge.

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Although the mortality salience manipulation did not yield significant effects, the intrinsic religious orientation that was given as a pre-measure did prove to be a valid assessment of religiosity. There were consistent main effects using this measure, such that, exhibiting a higher religious orientation was associated with preferring more general support by God, current support by God, and current social support. Also, the higher the participants' level of intrinsic religiosity, the less they preferred currently or generally relying on themselves.

Limitations and Future Directions

One limitation of this study concerns the sample that was used, namely, college age students. This is potentially problematic because a young individual may not be able to contemplate their death in the same way as an elderly person or an individual who is actually experiencing his/her death. Relatedly, an individual's preference for support while facing his/her real death may not reflect the same preferences a young individual might experience. This may partially explain the null results with respect to the mortality salience manipulation. It may be the case that an 18-year old may not be able to fully contemplate his/her demise. One possible strategy to deal with the general issue of college students not being able to contemplate their own death (compared to an elderly population, for example) would be to code their responses to the mortality salience questions. Specifically, one might code the responses to the mortality salience manipulation into categories representing participants who followed the mortality manipulation instructions correctly (see Appendix H) versus those who did not (see Appendix I). The lack of concern and heightened apathy during the experiment is another problem that can occur when using college-aged samples. The participants who did not follow directions could be temporarily eliminated or discounted, leaving only the participants for which the manipulation seemed to have produced a true state of death-contemplation.

On the other hand, many published articles in the terror management literature report results based on college student samples. Thus, the age difference noted above is not quite

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satisfactory as an account for no mortality salience effects. Another possibility is that the mere presence of questions about God and social support (which are sources of worldviews and self-esteem) in the battery of dependent measures served the function of alleviating mortality salience. In other words, the mere contemplation of God, friends, and family following the mortality salience manipulation may have precluded the hypothesized motivation to want those sources of support more than compared to the other conditions. Indeed, although not significant, the directional differences in the means for the key support measures (see Table 2) are somewhat supportive of this alternative.

Another avenue to pursue in future research would be analyzing the participants' responses for death-related words or the anxiety content, then testing whether the degree of death content or anxiety mediates the path between mortality salience and choice of support. In this case, the reason why people who are experiencing death anxiety would chose a certain path of support may be due to the rich death- or anxiety-related content (or lack thereof) in their statements regarding their demise. One possible way of testing this idea is to use the Linguistic Inquiry and Word Count (LIWC) program (Chung & Pennebaker, 2007; Pennebaker, Mehl, & Niederhoffer, 2003; Pennebaker, 1993). This program is a tool used for analyzing and counting written text. Pennebaker and colleagues created this text analysis program to help facilitate the analysis of written words. This program has an internal default dictionary (composed of almost 4,500 words or word stems) to which one can submit written text in order to see patterns (e.g. negativity, positivity) in what was written. In this program, one can analyze the death-related or anxiety-related content more efficiently than having judges or raters sift through many paragraphs and code for the death-related or anxiety-related information. LIWC has a "death" category already programmed in its default dictionary with 62 words in that category (e.g., bury, coffin, kill). This program also has an "anxiety" category with 91 words in that category (e.g.,

worried, fearful, nervous). This system would be a valuable resource in future analyses for the death/anxiety related content in the mortality salience written scenarios.

I also believe my control condition may have not been an appropriate one to use, due to the negative mood, sadness, anxiety, and anger that it seemed to evoke in this sample of participants. A typical Monday for an average college age student may be a negative and anxiety-provoking experience. This unexpected finding can cause skepticism with regard to the terror management literature and the researchers' methods used to study this phenomenon. If a typical Monday for this sample created more negative affect than the thought of experiencing dental pain or death, then this finding calls into question the validity of using a mortality salience manipulation to target the fear of one's demise. It may have something to do with social desirability keeping people from admitting anxiety in the dental and death conditions, whereas there is not social desirability inherent in hating Mondays. Therefore, future research might use a different day of the week. Furthermore, terror management researchers may want to incorporate another condition (in addition to the dental pain and mortality salience) when manipulating mortality salience. An additional limitation to this study was in using self-report measures of religiosity, support, and trust. A supplemental approach to targeting these concepts would be to measure them behaviorally. It would be interesting to see if people who had a terminal illness increased their religious behaviors (e.g., going to church, praying more, joining a church group) in order to cope with their death. These findings are typical in the terror management literature, such that, researchers do not find differences between their anxiety condition (which is usually a control condition when using a mortality salience manipulation) and mortality salience condition mood checks). I also note the lack of differences in the mood checks between the experimental conditions (i.e., mortality salience and anxiety). These findings are typical in the terror management literature, such that, researchers do not find differences between their anxiety condition (which is usually a control condition when using a

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mortality salience manipulation) and mortality salience condition mood checks. Researchers find significant differences in their key outcome measures, but not in the mood checks (see Greenberg et al., 1997). However, future research could incorporate testing physiological responses (i.e., heart rate, blood pressure) from the participants as an alternative to a pencil/paper measure of their mood. In doing this, researchers can assess how much anxiety the participant is experiencing.

A further limitation that might be addressed in future research is the use of both general (God, people, self) support and specific (current God, people, self-support) support scales, which were given to the participant at the same time in the current study. This may be problematic because individuals might answer the general and specific questions differently (i.e., generally how I act is different from this specific instance). However, it seems that participants were answering consistently with regard to general and specific support due to their moderate correlations (see Table 1). Additionally, participants may have interpreted the questions different than the research had intended. For instance, the items assessing social support (e.g., At the present moment, how strongly would you prefer to be with family and friends.) may have primed a desire to be with friends and family regardless of the experimental manipulation. There were also many models that were analyzed in the study, which can heighten the risk for type-I error. Although I did conduct many analyses and produced different models, every analysis that I conducted had an a priori hypothesis before statistical tests were run. In order to control for type-I error, I used Bonferroni alpha level adjustment in order to differentiate true significant effects from those found by chance.

Conclusion

This project was the first to examine the combined effects of mortality salience, intrinsic religiosity, and the preference for different sources of support in a laboratory setting. Even though the a priori hypotheses were not supported by the data, there were some intriguing

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findings that future research may wish to examine further. Allport and Ross (1967) developed a scale that targeted intrinsic religious orientation, and the current project showed their scale to be a valid measure of religious orientation. Religion is very important to many individuals, providing them with a purpose for living (Baumeister, 1991), as well as other social benefits. Having a scale available to measure such powerful motivations (viz., religious beliefs) for individuals' behaviors is quite remarkable.

The goal of research in general is to carefully, repeatedly, and diligently search a phenomenon. Although theoretical predictions regarding any phenomenon are often supported, other times they are not. Even though, in the current sample, mortality salience did not seem to differentially motivate individuals to prefer certain support systems over others (e.g., people or God), I still believe that it is important for researchers to investigate this concept further. For example, it might be interesting to examine the type of support system that individuals who are actually being confronted with their imminent death would prefer to use as a coping method (e.g., clergy, social networks, etc.). It would also be interesting to determine whether different support systems are chosen by those people who are merely contemplating their mortality and by those who are actually facing it. In any case, more research is needed to understand the interplay between the experience of the pervasiveness of religion and the knowledge of the inevitability of death.

APPENDIX A

INTRINSIC ORIENTATION SCALE

For each statement below, select a number from 1 to 5 to indicate your level of agreement.

1. I try hard to carry my religion over into all my other dealings in life.
I strongly disagree   1   2   3   4   5   I strongly agree

2. Quite often I have been keenly aware of the presence of God or the Divine Being.
I strongly disagree   1   2   3   4   5   I strongly agree

3. My religious beliefs are what really lie behind my whole approach to life.
I strongly disagree   1   2   3   4   5   I strongly agree

4. The prayers I say when I am alone carry as much meaning and personal emotions as those said by me during services.
I strongly disagree   1   2   3   4   5   I strongly agree

5. If not prevented by unavoidable circumstances, I attend my house of worship...
I strongly disagree   1   2   3   4   5   I strongly agree

6. If I were to join a religious group I would prefer to join (1) a Bible study group or (2) a social fellowship.
I strongly disagree   1   2   3   4   5   I strongly agree

7. Religion is especially important to me because it answers many questions about the meaning of life.
I strongly disagree   1   2   3   4   5   I strongly agree

8. I read literature about my faith.
I strongly disagree   1   2   3   4   5   I strongly agree

9. It is important to me to spend periods of time in private religious thought and meditation.
I strongly disagree   1   2   3   4   5   I strongly agree

APPENDIX B

TEN ITEM PERSONALITY SCALE

For each statement below, select a number from 1 to 5 to indicate your level of agreement.

1. I see myself as extroverted, enthusiastic.

I strongly disagree   1   2   3   4   5   I strongly agree

2. I see myself as critical, quarrelsome.

I strongly disagree   1   2   3   4   5   I strongly agree

3. I see myself as dependable, self-disciplined.

I strongly disagree   1   2   3   4   5   I strongly agree

4. I see myself as anxious, easily upset.

I strongly disagree   1   2   3   4   5   I strongly agree

5. I see myself as open to new experiences, complex.

I strongly disagree   1   2   3   4   5   I strongly agree

6. I see myself as reserved, quiet.

I strongly disagree   1   2   3   4   5   I strongly agree

7. I see myself as sympathetic, warm.

I strongly disagree   1   2   3   4   5   I strongly agree

8. I see myself as disorganized, careless.

I strongly disagree   1   2   3   4   5   I strongly agree

9. I see myself as calm, emotionally stable.

I strongly disagree   1   2   3   4   5   I strongly agree

10. I see myself as conventional, uncreative.

I strongly disagree   1   2   3   4   5   I strongly agree

APPENDIX C

EMOTION CHECK

Please indicate the degree to which the following emotions describe how you feel right now:

angry
not at all   1   2   3   4   5   6   7   very much

worried
not at all   1   2   3   4   5   6   7   very much

sad
not at all   1   2   3   4   5   6   7   very much

anxious
not at all   1   2   3   4   5   6   7   very much

cheerful
not at all   1   2   3   4   5   6   7   very much

tense
not at all   1   2   3   4   5   6   7   very much

depressed
not at all   1   2   3   4   5   6   7   very much

nervous
not at all   1   2   3   4   5   6   7   very much

irritated
not at all   1   2   3   4   5   6   7   very much

pleasant
not at all   1   2   3   4   5   6   7   very much

furious
not at all   1   2   3   4   5   6   7   very much

agitated
not at all   1   2   3   4   5   6   7   very much

indifferent
not at all   1   2   3   4   5   6   7   very much

happy
not at all   1   2   3   4   5   6   7   very much

APPENDIX D

EMOTION ON 3 DIFFERENT FACTORS

	Factor Loadings		
	1	2	3
ANXIOUS	**.848**	.165	.088
WORRY	**.797**	.223	-.077
NERVOUS	**.764**	.110	.081
TENSE	**.757**	.283	-.092
DEPRESSED	**.653**	.232	-.284
SAD	**.649**	.190	-.368
FURIOUS	.225	**.789**	-.079
ANGRY	.317	**.761**	-.049
IRRITATED	.459	**.737**	-.066
AGITATED	.528	**.618**	-.042
PLEASANT	-.078	-.118	**.859**
HAPPY	-.124	-.155	**.887**
CHEERFUL	.003	-.047	**.877**
INDIFFERENT	-.013	.422	-.138

APPENDIX E

TRUST IN GOD AND PEOPLE ARE DIFFERENT FACTORS

	Factor Loadings	
	1	2
GOD TRUST 4	**.970**	-.016
GOD TRUST 3	**.964**	-.035
GOD TRUST 2	**.956**	-.034
GOD TRUST 5	**.940**	-.036
GOD TRUST 1	**.921**	-.033
SOCIAL TRUST 3	-.009	**.920**
SOCIAL TRUST 4	-.097	**.916**
SOCIAL TRUST 2	.047	**.908**
SOCIAL TRUST 5	-.053	**.884**
SOCIAL TRUST 1	-.037	**.862**

APPENDIX F

GOD, SOCIAL, AND SELF SUPPORT ARE SEPARATE FACTORS

	Factor Loadings		
	1	2	3
General Support by God 2	**.913**	.043	-.154
General Support by God 1	**.902**	.098	-.205
General Support by God 3	**.851**	.118	-.119
General Support by God 5	**.790**	.003	-.060
General Support by God 4	**.777**	-.011	-.169
General Social Support 3	.000	**.907**	-.109
General Social Support 2	.078	**.902**	-.113
General Social Support 1	.070	**.854**	-.010
General Social Support 5	.050	**.841**	-.056
General Social Support 4	.028	**.799**	.080
General Self Support 4	-.118	-.087	**.845**
General Self Support 2	-.149	.060	**.806**
General Self Support 1	-.141	.048	**.789**
General Self Support 5	-.119	.002	**.776**
General Self Support 3	-.132	-.281	**.676**

APPENDIX G

CURRENT SUPPORT ARE SEPARATE FACTORS

	Factor Loadings		
	1	2	3
Current Support by God 2	**.962**	.054	.016
Current Support by God 3	**.962**	.079	.063
Current Support by God 1	**.920**	.086	-.078
Current Social Support 3	.142	**.896**	-.170
Current Social Support 2	.106	**.846**	-.095
Current Social Support 1	-.026	**.846**	-.103
Current Self Support 3	-.078	-.325	**.800**
Current Self Support 2	-.228	-.341	**.736**
Current Self Support 1	.289	.144	**.693**

APPENDIX H

MORTALITY SALIENCE SERIOUSLY

. Please briefly describe the emotions that the thought of our own death arouses in you.

Participant #1: "When the time comes I hope to have lived a full and adventurous life. I do want it to be quick, I don't want to be on my death bed forever. Emotions would be different depending on the situation, but in all content with how I lived while I could."

Participant #2: "The emotions I feel about death are good emotions. I feel like I would be released of the burden of a human body. I would be happy to be with my God and my loved ones who have passed. I would also feel sadness and fear for my children's husband. I am young, but I would feel fulfilled with my live. I have experienced great tragedy and joy, and this is knowledge I know taking to death. I think I would be peaceful in the end."

2. Please jot down, as specifically as you can, what you think will happen to you as you physically die and once you are physically dead.

Participant #1: "I know you want me to answer this question, but I can't, I don't know what is up there, if there is anything. I was raised Christian, but always had more questions than anyone could answer. I have seen war and death, and neither looks like a higher power I want. I've seen someone die and as the die they did not look like they were going to a better place….more like, 'put me out of my misery.' The idea seems great, to go to a better place, but is it true or just he 'scared' trying to look for a meaning to the end. To put their mind at ease as they slip away to 'nothing' only to be recycled back to the earth. (circle of life). Some people need this to be better people while they live."

Participant #2: "When my organs and body physically shut down, I would like to have them harvested, so they may be used to save another's life. My should will no longer be here, so my body, will become just that, a vessel used for life here on Earth. I want to be cremated, or burned to ash. I want my ashes spread over Ireland and Egypt. I don't want my body to become wasted in some coffin, I don't want it to rot. I want it to be a peaceful death, not one that would

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traumatize. I don't want to decay. I want to stay the same as I did before. I don't want a decayed

body, but a memory of who I was, I will get this by being cremated."

APPENDIX I

MORTALITY SALIENCE NOT SERIOUSLY

1. Please briefly describe the emotions that the thought of our own death arouses in you.

  Participant #1: "Everyone lives and dies. I believe God has a plan for everyone. When it is your time you will die."

  Participant #2: "I can't think about it."

2. Please jot down, as specifically as you can, what you think will happen to you as you physically die and once you are physically dead.

  Participant #1: "Nothing will happen you will be dead."

  Participant #2: "When I die, I believe in go to hell or heaven. Depend on what kind of life had."

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Jennifer Jones completed her Bachelor of Arts degree in Psychology at the University of Texas at Arlington in 2004. Under the supervision of Dr. Jared B. Kenworthy, Jennifer received a Master's of Science degree in experimental psychology (May, 2008) and her Doctoral degree in experimental psychology (May, 2011).

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