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# The Level of Commitment of Intrinsic Religiosity and Relational Aggression In Middle-Aged Women

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The University of Southern Mississippi

THE LEVEL OF COMMITMENT OF INTRINSIC RELIGIOSITY AND RELATIONAL  
AGGRESSION IN MIDDLE-AGED WOMEN

By

Hannah Allen

A Thesis

Submitted to the Honors College of  
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of the Requirements for the Degree of  
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## The Level of Commitment of Intrinsic Religiosity and Relational Aggression in Middle-Aged Women

### **Introduction**

Bullying has gotten a great deal of attention in the media the past few years. Although much of the research conducted has related to physical aggression, relational aggression has as great an effect on a person's mental and emotional state and has the potential to cause low self-esteem or confidence, social withdrawal, or even depression. Simmons (2004) states that relational aggression is a common bullying tactic used among females and occurs just as frequently as the overt aggression found in male behavior. Despite this fact, society largely ignores women's experiences of aggression even though they report levels of anger equal to men and have the same potential for harm (Simmons, 2004).

Empirical studies involving aggression are beginning to expand the definition of what is considered aggressive behavior. Relational aggression causes equally, if not more, significant damage than physical aggression and seems to be a commonly exhibited behavior among all ages (Bjorkqvist & Osterman, 1992; Crothers, Lipinski, & Minutolo, 2009; Olweus, 1993; Remillard & Lamb, 2005; Simmons, 2004). Whereas most research pertaining to overt and relational aggression focuses on children and adolescents, it is important to note that aggression takes place in adults as well, especially in the workplace (Barling, Dupre, & Kelloway, 2009; Crothers, et al., 2009; Hershcovis et. al, 2007; Legarreta, 2008).

The ubiquitous nature of aggression raises many questions. What are the antecedents and motives behind this aggression that appears to be so common? What are the protective and risk factors associated with victimization in aggression? How do life factors affect one's likelihood to become an instigator? Does religion play a role? Does it protect against aggression? All of

these questions and more need to be answered through an expanding canon of research about all the types of aggression, not simply the overt behaviors.

### **Intrinsic Religiosity**

In our modern times, people have become more aware of the various types of religious expression and the role it plays in culture and the lives of individuals. Religion has the capacity to motivate, socialize, and direct human behaviors and choices (Harris, 2003; Leach, Berman, & Eubanks, 2008; Saraglou, Pichon, Trompette, Verschueren, & Dernelle, 2005; Silberman, 2005; Welch, Tittle, & Grasmick, 2006). While religion is typically thought to teach morality, aggressive acts have been committed in the name of religion throughout world history. Specifically, incidences of genocide, terrorism, and other world conflicts have often been committed in the name of religion (Silberman, 2005).

However, theorists and clinicians have for many years believed that commitment to a religion may actually prevent aggressive and other anti-social behaviors. In fact, almost all psychological theories addressing the role of religion indicate that religion contributes to prosociality and provides a buffer for the natural destructiveness humans cause through their individual impulses and drives (Saraglou, Pichon, Trompette, Verschueren, & Dernelle, 2005). The idea is simple: there are certain aspects of religion that may elicit predictable responses in the lives of the people that are committed to it, and the more an individual is committed to his/her religion, the more likely he/she is to reflect it through obedient actions (Regnerus & Smith, 2005). In fact, church attendance and religious commitment have been found to be supportive of several measures of enhanced personal well-being, especially in middle-aged people, and intrinsic religiosity in particular has been supported as a common mechanism for coping with distress (Wilkum & MacGeorge, 2010; Willis & Crider, 1988). Existing literature

argues that religion can be both dysfunctional and functional for an individual, but little empirical support has been found for a negative relation between religiosity and well-being (Wilkum & MacGeorge, 2010).

Some theorists attribute higher levels of self-control and conformity to religion. In fact, religion ranks high in research among social institutions that promote conformity to societal norms (Welch et al., 2006). Religion provides reinforcements and punishments that concretely set societal moral standards and help produce internalized commitments to norms. Some argue that religious individuals are compelled to live a life of obedience for fear of supernatural, future consequences (Harris, 2003). Others conceive that religious people can better internalize moral commitments to avoid feeling guilty (Bandura, 1977). Contrastingly, Welch and colleagues (2006) did a study assessing the relation between religiosity and self-control as a function of social conformity. They found that although self-control and religiosity were both inversely related to crime and deviance, it could not be said that self-control was an explanation for the association between religiosity and social conformity.

These findings cannot be analyzed apart from a consideration for the context of religious commitment. One dimension to consider is the existence of a higher deity who watches over the world and cares for the individual. A second dimension includes religious practice, encompassing such activities as worship, prayer, and participation in sacraments (Regnerus & Smith, 2005). In some circumstances, people may come to accept certain religious beliefs because they satisfy some basic cognitive need which arises as a part of the mental development. Peer and friendship networks influence religiosity in some ways (Regnerus & Smith, 2005).

Ninety percent of American adults believe in God or a universal deity (Pew Forum, 2008). Interestingly, however, little empirical research has been done recording the relation

between religious belief and aggressive behavior though it seems to be such a dominant belief in American society. This lack of empirical support makes it hard draw a causal link between religiosity and aggression. It is unclear what the true relationship between religious ideology and aggression is, although some attempts have been made to understand it. Allport and Ross (1967) identified two types of religious orientation: intrinsic religiosity and extrinsic religiosity.

Basically, self-reported intrinsic religiosity refers to individuals making life choices using an internal faith (e.g., I try to live my life by what God wants), whereas extrinsic religiosity refers to individuals who more outwardly use their faith for some sort of personal gain (e.g., I feel good when I attend church). Intrinsic orientation refers to those who are internally committed to religious belief and consider it an integral part of who they are, whereas extrinsic orientation refers to those who are less likely to associate themselves closely with their religion but rather, participate exclusively in external rituals with less of an emotional connection. Greer, Brobryki, and Watson (2005) found that intrinsic individuals were less likely than extrinsic individuals to self-report that they would behave resentfully when faced with a potentially aggressive situation. This study was limited because it relied solely on a self-report measure to gauge religious beliefs and did not include a measure of behavioral religious activities to assess individuals as either intrinsically or extrinsically religious.

In many studies involving religion as an influence of prosociality, religious people have been found to recognize themselves as prosocial and helpful to others, but some studies also claim that intrinsically religious people only appear to be helpful but are actually preoccupied with their own self-image. Batson and Flory (1990) found that intrinsically religious individuals self-reported that they would help others, but they did not follow through with the behavior. Saraglou and colleagues (2005) predicted that, although religion should not necessarily be



associated with extreme altruism, it should be expected as an influence of low aggression in close relationships and regular interactions. Their study revealed that religiosity plays a small but real role in prosociality. In addition, evidence showed that religious women tended to respond in a less aggressive manner than religious men when faced with hypothetical daily problems.

Many social scientists agree that a degree of religious commitment parallels with organized religious group rituals and behaviors (e.g., church attendance). Most evidence relating religiosity to aggression has come from non-experimental studies using self-reported measures. These empirical studies investigating religiosity, spirituality, and aggression are scarce. Studies that have been done are older and occurred using laboratory measures of aggression in which aggression was observed under controlled conditions. Results of the studies present inconsistent evidence concerning the role of religiosity in aggression, with positive, inverse, and no relation reported (Maloney, 2004).

Leach and colleagues (2008) hypothesized that individuals participating in such religious activities as Bible-reading and meditation/prayer would exhibit less aggressive behavior toward a fictitious opponent in a controlled environment. They also predicted that intrinsically religious participants would self-report less aggression but show no differences in aggressive behavior from extrinsically religious participants. On the other hand, some studies have supported that religious people in general show similar levels of compassion to non-religious people. In an experiment that required participants to shock other individuals, participants and non-participants of religious activities exhibited similar average shock levels. However, intrinsic orientation appeared to be unrelated to average shock setting though it was inversely related to self-reported aggressive tendencies (Leach et al., 2008). These behavioral results contradict the teachings of

the major religions which claim that religious practice will decrease aggressive tendencies. This study helped bridge the gap between experimental and self-reported studies, but now the relation between these self-reported measures and behavioral measures needs to be emphasized.

### **Relational Aggression**

Three types of bullying have been reviewed in psychological literature: overt physical aggression, overt verbal aggression, and relational aggression (Remillard & Lamb, 2005). Much of the research conducted about aggression has examined overt behaviors because they are easily identifiable. Overt aggression refers to acts of physical and verbal aggression that are hurtful to another person. Physical demonstrations of aggression occur when physical damage or intimidation is inflicted upon the other person and serves as the main source of harm toward that other person. Relational aggression, also known as social aggression or indirection aggression, is reflective of behaviors designed to harm another person through the exploitation of a relationship (Remillard & Lamb, 2005). It includes behaviors intended to threaten relationships which may contribute to the loss of a social connection through social isolation or alienation. It sometimes refers to a manipulation of relationships in order to inflict emotional pain, and it can be done through acts such as gossiping or rumor-spreading. It occurs as a form of “intentional exclusion from a group” (Olweus, 1993, p. 10). This aggression can have a significant damaging impact upon personal demeanor and daily tasking. It has been shown to reduce citizenship behavior and diminish self-esteem and work performance, and in general, it can contribute to psychological strain upon victimized individuals (Barling et al., 2009; Simmons, 2004).

Aggression has typically been studied extensively in children and adolescents, and researchers are unsure whether or not their findings extend to adults. Sadly, there is an incredibly small amount of research actually pertaining to adult aggression. In my review of the

literature, I found many studies that have been done in relation to aggression in adults focused on workplace bullying and management and organizational issues. These researchers sought to understand why it occurs and what causes it. In one study, the researcher summarized workplace bullying by explaining the organizational antecedents of bullying using a model to identify factors associated with bullying (Barling et al., 2009). They concluded that bullying is an interactional process between certain necessary antecedents (e.g., power imbalance, dissatisfaction), motivating incentives (e.g., competition, reward, expected benefits), and triggering circumstances (e.g., organizational changes, restructuring; Barling et al., 2009). Another study used the Work Harassment Scale to analyze adult indirect aggression and discovered that it occurs in two different forms: 'social manipulation' and 'rational-appearing aggression.' (Bjorkqvist & Osterman, 1992) Social manipulation is more similar to what is seen in adolescents, whereas rational-appearing aggression is a more sophisticated type of aggression that involves the aggressor committing an aggressive act while simultaneously trying to appear as not being aggressive at all (Bjorkqvist & Osterman, 1992). Examples of victimization of these types of aggression in the workplace might include not being allowed to express one's thoughts and excessive criticism. Aside from the workplace, adult relational aggression has been generally unexplored, possibly due to the fact that there are few studies to date identifying the forms of adult indirect aggression that take place in day-to-day interaction.

Research to date has found that, in general, men behave more aggressively than women but that men and women do not differ in their levels of indirect aggression (Hershcovis, 2007). In addition, men and women tend to be equally victim and instigator. Although this is the case, the type of bullying used by women tends to be qualitatively different than the type used by men, but it is suggested that women have the potential to be just as aggressive as men (Bjorkqvist &

Osterman, 1992; Salmivalli and Kaukiainen, 2004). While these researchers argue that relational aggression should not be considered an exclusively female behavior, many others conceptualize it as such. Women tend to more commonly demonstrate their aggression through relational behaviors, and females in past studies have been more likely than males to report being victimized through relational aggression (Simmons, 2004). In fact, most research suggests that women use their social intelligences to covertly manipulate relationships and damage reputations as a method of obtaining power through behaviors such as gossiping, rumor spreading, or stealing friends and romantic partners (Salmivalli & Kaukiainen, 2004; Simmons, 2004). Researchers suggest that in the workplace, at least 58% of bullies are female, and female bullies tend to most often victimize other females, targeting other women almost 90% of the time (Workplace Bullying Institute, 2006).

Although the effects of relational aggression are beginning to be researched, the causes are not yet understood. Extant research argues a complex web of factors is related to relational aggression in women. In one 2006 study, Hickman found that maladjustment was linked significantly to higher levels of relational aggression, especially in females. In addition, one possible reason for the popularity of relational aggression among women is that it does not impose upon the traditional female gender role. Children learn their gender roles within the first three years of life and incorporate these views into their daily behaviors (Crooks & Baur, 2008). Simmons (2004) asserts that despite our current equal rights society, some behaviors in women continue to be frowned upon. Females are typically reinforced by parents, role models, significant others, and the media to be inherently good or nice. They are expected to acquire certain self-concepts parallel with cultural conceptualizations of femininity. As children, they are discouraged from using rough and tumble play. As adults, they are expected to interact

harmoniously and without complaint. They have a fear of being rejected by their peers which feeds their motivation to avoid upsetting or countering their friends or significant others, and this behavior prevents them from having authentic relationships. Females may feel unable to express anger or hurt feelings because they are encouraged to consider others' reactions when delivering highly emotional messages (Simmons, 2004). Since directness and overt confrontation conflict with traditional female gender roles, females are, in a sense, forced to use manipulative and covert means of resolving conflict (Crothers et al., 2009; Simmons, 2004). It is important for researchers to continue questioning the causes behind more subtle forms of aggression. In order for the prevalence of relational aggression to be reduced among the female population, individuals in our society must open their minds to a more complex and realistic view of women that recognizes their aggressive tendencies (Crothers et al., 2009).

### **Goals and Hypotheses**

The study examined the relationship between the level of commitment to intrinsic religiosity and the role of relational aggression in the lives of middle-aged women. Research has shown that middle-aged women participate in relational aggression, but few studies have investigated it. The causes and methods of prevention in relational aggression are something to be considered, and a first step is examining risk and protective factors. Is intrinsic religiosity a protective or risk factor for participating as an instigator in relational aggression? Does intrinsic religiosity actually buffer the negative effects associated with victimization in relational aggression? Based on research that previously examined the relationship between religiosity and prosociality, I hypothesized that women who are more intrinsically religious will be less likely to participate in relational aggression. Based on research surrounding the benefits of religion to

well-being, I also hypothesized that more intrinsically religious women will feel less victimized by aggression than women who are less intrinsically religious.

## Methodology

### **Overview and Predictions**

The goal of this study was to investigate whether intrinsic religiosity is associated with relational aggression in middle-aged women. As previously stated, there were two predictions for the study: Women with a greater commitment to intrinsic religiosity will be less likely to participate in relational aggression; and women with a greater commitment to religiosity will feel less victimized by aggression than women who are not as committed to religion. To accomplish this goal, participants completed a questionnaire measuring religiosity and relational aggression traits. All of the measures were completed via Qualtrics software.

### **Participants**

The target demographic for this study was middle-aged women. Although the term “middle age” is difficult to define, this study sought to encompass all ages between the end of the emerging adulthood stage, the time period during the late teenage years and the twenties when an individual becomes increasingly independent from their parents, and the beginning of the later adulthood, the time period that starts during an individual’s sixties and can be characterized by events such as empty nest syndrome and retirement (Arnett, 2000; Broderick & Blewitt, 2003). Data for this study was collected from 316 female participants between the ages of 30 and 55. Although 316 women completed the questions, 99 participants were omitted for being outside of the age range applicable to the study, leaving a valid participant pool of 217. These women were taken from the mailing lists of various Junior Auxiliary organizations, university faculty and staff directories, and the social networking website Facebook. The population that was studied via the

sample was middle-aged women of diverse religious background and socioeconomic statuses. Participants were asked to indicate their age by reporting the month (“In which month were you born?”) and year of their birth (“In what year were you born?”). Women between the ages of 35 and 44 made up the majority at 37.2 percent of the participant pool. Following them, women between the ages of 45 and 55 made up 18.9 percent of the participant pool. The smallest age group of women was between the ages of 30 and 34, making up 12.8 percent of the participant pool.

For descriptive purposes, participants were asked to identify their race by giving only one response to the following question: “What is your ethnic/racial background or heritage?” The majority of the racial makeup was Caucasian, with 93 percent of the participant pool. Directly behind them, African-Americans made up 3.5 percent of the participant pool. The remaining racial makeup of the sample was as follows: 0.3 percent Native American, 0.9 percent Asian American, 0.6 percent Hispanic, 0.3 percent Pacific Islander, and 1.3 other.

Women who were married and living with a spouse made up 70.8 percent of the participant pool. Singles who had never married made up 18.3 percent of the participant pool, and singles who had previously divorced made up 9.6 percent of the participant pool. Women who were permanently separated from their spouse made up 0.3 percent of the participant pool, while widowed women made up 1.0 percent.

The majority of participants had received some college education or a year of specialized training or higher, making up 96.5 percent of the participant pool. Participants who were high school graduates only made up 2.8 percent. Participants who received an education of 9<sup>th</sup> grade or below made up 0.6 percent. Finally, the majority of participants, at 38.3 percent, were in occupations of executive duty and administration, medium to large businesses, or major

professionals. Following, 25.7 percent classified themselves as small business owners, managers, semi-professionals, technicians, or clerical or sales workers. Participants who identified themselves as unskilled workers, laborers, service workers, students, or housewives made up 16.1 percent. A significant portion, 19.9 percent of participants did not list their occupation or identified as non-applicable/unknown.

### **Independent Variable**

*Intrinsic Religiosity.* The measure used for this variable was Hoge's Validated Intrinsic Religious Motivation Scale. It was shown to be reliable and valid through two validation studies (Hoge, 1972). Three items (church status, religious involvement, praying) were summed to form an intrinsic religiosity score, representing an individual's notion of religion as a relationship with a Godly being accompanied by certain heartfelt religious practices. Church status included a combination of church attendance and membership. Combining these two concepts into one item captures a dynamic far more consistent with possessing an internal commitment to religion than church attendance alone. Some individuals attend church for mere external reasons (e.g., out of obligation, to impress others, to subside guilt) and may not think it important to become a member of any particular religious institution. Others join the church as a member and rarely attend services. It could be assumed that high levels of involvement within church programming represent a stronger commitment to religious conviction than church membership only. People for whom their commitment to church lies in a once a week (or less) church attendance seem less committed than those who participate in all aspects of church programming throughout the week. In conclusion, the more a person participates in the activities of his or her church or religious organization, the more evidence this provides for a religious commitment that will impact behavior (Hoge, 1972). In addition, prayer will be viewed as a more relational act in the sense



that it is a personal component of religious commitment. Assessing how often people pray helps to distinguish between ritualistic prayer and relational prayer. People going through the motions of extrinsic religiosity would not find much value in prayer. They would only pray at times when it would be beneficial for their religious image, such as in front of others. However, those with a strong commitment to God would pray frequently and mostly in private (Hoge, 1972).

### **Dependent Variable**

*Relational Aggression.* The measure used for this variable was the Self-Report of Relational Aggression/Victimization Measure (Linder, Collins, & Crick, 2002). The Self-Report of Relational Aggression/Victimization Measure is a subscale of the 56 item Self-Report of Aggression and Social Behavior Measure (SRASBM; Morales & Crick, 1998) and published by Linder and colleagues (2002). The instrument has demonstrated good reliability and validity in the past as tested by Murray-Close, Ostrov, Nelson, Crick, and Coccaro (2010) in two different studies. The subscale contained 42 items that ask participants questions associated with specific domains. These domains included relational aggression (peer and romantic), relational victimization (peer and romantic), physical aggression, physical victimization (peer and romantic), interpersonal jealousy and pro-social behavior. The participants were instructed to answer some questions based on their current romantic relationships. If they were not in a romantic relationship they were instructed to answer the questions about a relationship they had within the past year. If they had not had one in the past year, they were instructed to leave those questions blank. An example of a romantic relationship question was “I try to make my romantic partner jealous when I am mad at him/her.” An example of a question pertaining to peers was “When I am not invited to do something with a group of people, I will exclude those people from future activities.” This scale also measured pro-social behaviors. A typical question regarding

pro-social behavior was “I am usually kind to other people.” All of the questions from this measure were answered on a Likert Scale from 1 to 7, with 1 being *not true at all* and 7 being *very true* (Linder, Collins, & Crook, 2002).

### **Design and Procedure**

This study, approved by The University of Southern Mississippi Institutional Review Board, used correlational analyses to assess if there is a relationship between intrinsic religiosity and relational aggression in middle-aged women. The questionnaire was placed on Qualtrics, and women were able to access it through a link in the invitation email or a link advertised on the social networking site Facebook. A standard data collection protocol was followed and consisted of a self-report data collection instrument that included instructions on how to complete the survey, a description of the research project, and assurances of anonymity. After the background form was completed, the survey was given. Upon completion, participants were allowed to view a debriefing form, further explaining the study.

### **Results**

This study sought to find the relationship between the level of intrinsic religiosity in middle-aged females and the likelihood that they would participate in relational aggression. It also sought to find the relationship between the level of intrinsic religiosity in middle-aged females and the degree to which they have felt victimized by relational aggression. Finally, it sought to find out whether intrinsic religiosity related to a middle-aged female’s reaction to victimization. I hypothesized that women who are more intrinsically religious will be less likely to participate in relational aggression. I also hypothesized that women with a sense of intrinsic religiosity will feel less victimized than women who are not intrinsically religious. Finally, I hypothesized that more intrinsically religious women would have more proactive reactions to

victimization and less reactive reactions. Using a Pearson correlation analysis of all questionnaire items, a slight positive correlation between intrinsic religiosity and total relational aggression was found, indicating that participants who were intrinsically religious were somewhat more likely to participate in relationally aggressive activities,  $r=0.046$ , though not statistically significant based on commonly accepted practices,  $p<0.533$ . Also, a non-statistically significant but very slightly negative correlation between intrinsic religiosity and total victimization was found, indicating that participants who reported being more intrinsically religious were less likely to report being victimized by aggression,  $r=-0.006$ ,  $p<0.933$ . There was a slight positive correlation, though not statistically significant, between intrinsic religiosity and reactive RA, indicating that participants who reported being more intrinsically religious were slightly more likely to become reactive when victimized by aggression,  $r=0.058$ ,  $p<0.410$ .

Although my research questions did not address it, I found a slight positive correlation that was not statistically significant between the birth years of the participants and the degree to which they reported engaging in relationally aggressive behaviors,  $r=0.063$ ,  $p<0.383$ , meaning that the older the participant was, the more likely they were to report participating in relation aggression. There was a slight negative correlation between the birth years of participants and the degree to which they reported being physically victimized by aggression,  $r=-0.051$ ,  $p<0.454$ , meaning that the older the participant was, the less likely they were to report being victimized by aggression.

## **Discussion**

The results of this study were not statistically significant, but they still give insight into the mysterious relationship between aggression and religiosity. This study found little to no relationship between relational aggression and the level of intrinsic religiosity of middle-aged females. Results of these past studies also present inconsistent evidence, with positive, inverse,

and no relation reported (Malony, 2004). Even in experimental studies, intrinsically religious and extrinsically religious or non-religious participants seem to have similar levels of moral compassion. For example, in Leach, Berman, and Eubanks's 2008 study that required participants to shock other individuals at increasingly high voltages, intrinsically and extrinsically religious participants as well as non-religious participants refused to continue shocking those individuals at similar shock levels. This study supports past research that the behavior of intrinsically religious individuals does not necessarily differ from extrinsically religious or non-religious individuals.

Most evidence relating religiosity to aggression has come from non-experimental studies using self-reported measures, and this study followed the same methodology. This study relied on a self-report measure to assess religiosity and relational aggression and victimization. Participants could have exaggerated or under-reported the severity or frequency of behaviors, events, or parts of their environment. The survey used a Likert-type scale, and there is a tendency for people to respond toward the middle of the scale to make themselves look less extreme (Jamieson, 2004). Future researchers may want to use more objective forms of measuring intrinsic religiosity, relational aggression, and victimization instead of or in addition to the self-report measure such as observation or peer-reported research. They also might want to use more objective measures of religiosity, or measures that are more universal in their religious terminology and less catered to Western religions. Another limitation is the sample diversity. The majority of participants were Caucasian, higher-educated individuals with a higher than average socioeconomic status. Future researchers would benefit from surveying a sample that better mirrors the population with a higher percentage of semi-professionals and high school graduates and a higher percentage of racial minorities.

## **Conclusion**

This study brings two questions to mind. First, is religion a necessity of morality? We have heard that religion has the power to motivate human behaviors and choices (Harris, 2003; Leach, Berman, & Eubanks, 2008; Saraglou, Pichon, Trompette, Verschueren, & Dernelle, 2005; Silberman, 2005; Welch, Tittle, & Grasmick, 2006). Most of the world's religions model choices of compassion and self-control, and studies have shown that religious people tend to engage in more prosocial behaviors (Saraglou, Pichon, Trompette, Verschueren, & Dernelle, 2005; Welch, et al., 2006). However, religious beliefs have been a cause of aggression throughout world history (Silberman, 2005). Conversely, it is clear that, in day-to-day human behavior, religious and non-religious people alike can perform an act of civil morality or neighborly righteousness. Some might argue that we live civilly or socially moral lives even without religious commitment partly because we would be reinforced into moral behavior by the socially-accepted norms surrounding us. Some could say that we innately act in moral ways for the good of mankind, thus contributing to the advancement of the human race which is a biological trait. This study certainly supports the belief that religion may not be synonymous with morality and that individuals who are not religious have the potential to be just as moral.

Another question that could be raised is whether religiosity can be truly measured? Most studies that have been done in the past have used self-report measures, a method that tends to leave room for error. Some studies have used peer-reported data; however some religions hold that religious acts should be done in private rather than in public to assure that the religious individual has the correct motives in his religious activities and is not simply doing them for outward appearances' sake. Experimental studies can be done, but some religions accept that a person's heart and internal beliefs are more important in determining their commitment than

their outward actions. Future researchers should consider conducting a joint study of observational, experimental, self-report, and peer-report measures to truly grasp the level of religiosity of a person in all its different facets.

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