ABSTRACT

RELIGIOSITY AND ATTITUDES TOWARD AGING

by Amanda Lauck

The purpose of this research is to explore the relationship between religiosity and attitudes towards aging. Specifically, this research investigates the relationship between specific kinds of Christian belief (fundamentalism, orthodoxy, puritanism, and humanism) and attitudes toward personal aging. Results show that individuals with more orthodox beliefs tended to have more positive attitudes about their own aging. Individuals with greater fundamentalist belief also have more positive attitudes about personal aging while those individuals who hold humanistic belief have more negative attitudes toward personal aging. These three kinds of beliefs were the only significant predictors of attitudes toward personal aging when controlling for age, gender, educational attainment and frequency of church attendance.

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Amanda Lauck
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Oxford, Ohio
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Advisor_____
                    Suzanne Kunkel, Ph.D.

Reader_____
                    Jennifer Kinney, Ph.D.

Reader_____
                    Anthony Peguero, Ph.D.

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CHAPTER I

Introduction

There is an abundance of literature that establishes associations between religiosity (defined in a variety of ways, including specific religious beliefs, religious behaviors, and spirituality) and a range of behaviors and attitudes. For example, greater church attendance has been found to be associated with less support for abortion (Harris & Mills, 1985; Davidson, Moore, & Ulltrup, 2004; Ellison, Echevaria, & Smith, 2005) and more conservative attitudes concerning premarital sex (Davidson, Moore, & Ulltrup, 2004). Those who believe strongly (typically categorized as highly religious) tend to have more negative beliefs and attitudes toward premarital sex (Rostosky, Regenerus, & Wright, 2003; Lefkowitz, Gillen, Shearer, & Boone, 2004). Individuals who are highly religious tend to have lower levels of death anxiety (Thorson & Powell, 1990; Wink & Scott, 2005; Harding, Flannelly, Weaver, & Costa, 2005). The breadth of the literature makes it reasonable to assume that religiosity may influence attitudes toward aging.

Further support for the possibility of an association between religiosity and attitudes toward aging comes from an extensive literature on religiosity and death anxiety. Benton, Christopher, and Walter (2007) argue that elements of death anxiety scales actually measure aging anxiety. Essentially, death anxiety inventories measure death anxiety in two ways: by actually measuring the fear of death and by measuring the fear of aging (Benton, Christopher, & Walter, 2007). For example, the Collett-Lester Fear of Death and Dying Scale includes the following item: "The intellectual degeneration of old age disturbs me." (Collett & Lester, 1969; Neimeyer, 1994, p. 57-58). Since the relationship between religiosity and death anxiety has been established using these imperfect measures of death anxiety there is question about if and to what extent religiosity influences scores on death anxiety and aging anxiety. This research focuses specifically on religious beliefs and attitudes about personal aging, disentangling aging from death anxiety, and adding to the broader literature on the relationship between religiosity and attitudes and behaviors.

While there are many religious belief systems worldwide, given that this study is conducted in the United States, a country which is predominantly Christian, and given the time constraints for completing this research, specific types of Christian beliefs is the focus of this study. Seventy-five percent of the individuals who participated in the 2008 U.S. Religious

Landscape Survey (2008) by the Pew Forum on Religion and Public Life, self-identified as Christians; 50% identified as Protestant. Religious beliefs vary across major belief systems (Protestantism, Catholicism, and Judaism) and specific beliefs also vary within these belief systems. Protestants include a number of denominations: Lutheran, Presbyterian, Methodist, Episcopalian, and Baptist to name a few. Attitudes vary across denomination, and even within denomination attitudes can vary significantly as there are more and less conservative subgroups within each denomination.

      With the majority of individuals in the United States self-identifying as Christians, studying the association between religious belief and various attitudes and behaviors is important. As gerontologist Ellen Idler states, "Religious faiths and practices are about making behaviors conform to beliefs; as the beliefs are different from one religion to another, so are the resulting behaviors. As these beliefs by definition concern ultimate things, they inform believers' views about birth and death, and the living and aging that implicitly takes place in between" (Idler, 2006, p. 278). Because of the variation across and within major belief systems it is fitting to examine the relationship between Christian religious beliefs and attitudes toward aging.

CHAPTER II

Literature Review

Religiosity has been linked to a variety of attitudes and behaviors varying from sex and abortion to death anxiety. In particular, research focuses on the ways that attitudes and behaviors are correlated with major belief systems, denomination, and specific religious beliefs. The following sections review some of this extensive literature, setting the stage for the importance and logic of examining religious beliefs and attitudes about aging.

Attitudes toward Sex

By denomination, Baptists hold the most conservative attitudes toward sex before marriage. Lutherans and Methodists hold the next most conservative attitudes, followed by Catholics and Presbyterians. Those not affiliated with a church, Jews, and Episcopalians are at the other end of the spectrum, reporting the most tolerant views of sex before marriage (Cochran & Beeghley, 1991). Thornton & Camburn (1989) found a similar pattern with Baptists and fundamentalists being less sexually permissive than other groups. Jews and individuals not affiliated with a church are more permissive than the other denominational groups (Thornton & Camburn, 1989). Not all research has found support for the relationship between denominations and varying attitudes concerning sex. For example, Lefkowitz, Gillen, Shearer, & Boone (2004) found that Protestants held more conservative views than nonbelievers, but Catholics did not significantly differ from Protestants or nonbelievers. Fundamentalist Protestants are more likely to state that they would feel guilty if they did not adhere to their parents' teachings about sex and feel more discomfort about masturbating as a form of sexual release (Cowden & Bradshaw, 2007).

Cochran & Beegley (1991) note that the members of each denomination generally hold views about sex before marriage that are quite similar to the official views of their church denomination. Further analysis suggests that church attendance is significant in predicting the attitudes about premarital sex. More frequent church and attendance and greater strength of religious identification were significant predictors of more conservative views of premarital sex among Catholics and Methodists. Strength of religious identification, religious organization membership, and church attendance were significant predictors of more conservative views of premarital sex among Lutherans. For Baptists, strength of religious identification, religious organization membership, church attendance, and belief in an afterlife were all significant

predictors of more conservative attitudes toward premarital sex (Cochran & Beegley, 1991). With these findings Cochran & Beegley (1991) suggest that the relationship between religiosity and attitudes toward premarital sex are not as straightforward or unidimensional as earlier research might have suggested. Not only do the attitudes vary by denomination, but different measures of religiosity predict these varying attitudes across denominations.

Attitudes toward specific kinds of premarital sex may also shed light on the role of various aspects of religiosity. Greater religiosity was moderately correlated with more negative beliefs and attitudes concerning intercourse and greater concern about becoming pregnant (Rostosky, Regenerus, & Wright, 2003). In addition, those who adhere more strongly to religious doctrine are less likely to believe that condoms can prevent negative outcomes associated with sex such as pregnancy or sexually transmitted diseases (Lefkowitz, Gillen, Shearer, & Boone, 2004). Focusing only on women, another study focused on the link between women's attitudes toward sex outside of marriage and church attendance. Women who attend church on a weekly basis were more likely than other study participants to agree that couples should not engage in oral and anal sex even if the couple chooses to use a condom. Women who attend church weekly are more likely to state that love must be present in a relationship before engaging in intercourse and are also more likely to desire marrying a virgin and with whom only they have had intercourse. Moreover, weekly female attendees were more likely than monthly or yearly female attendees to agree that sex before marriage is wrong and cite religious reason for not engaging in premarital sex. Likewise, weekly female church attendees who did not engage in masturbation, compared to their weekly and yearly attending counterparts, were more likely to report that they abstained because it was against their religious beliefs. Finally, weekly female attendees were more likely to feel guilt about engaging in masturbation, petting, first intercourse, and subsequent sexual encounters compared to females who attended church only on a monthly or yearly basis (Davidson, Moore, & Ulltrup, 2004).

The literature on religiosity suggests that various dimensions of religiosity are related to attitudes toward premarital sex, but findings are not always consistent. Church denomination, strength of belief, and frequency of church attendance are all important variables in the equation, but none perfectly predict attitudes toward premarital sex. Rather, a complex interaction among measures of religiosity may better account for the variation in this set of attitudes, as in others.

<u>Attitudes toward Abortion</u>

On the issue of abortion, Mainline Protestants and Evangelical Protestants have increasingly different attitudes on the subject. Even within a broad denomination, attitudes vary. For Mainline Protestants as well as Roman Catholics, the issue of abortion has become divisive within the church. Among Mainline Protestants a change in the numbers of individuals within certain demographic subgroups may, in part, be responsible for the divided attitudes of individuals within Mainline Protestant churches. The gap between the evangelical attendees who have some college education and those without any college education has decreased. The educated attendees of Mainline Protestant who held more conservative views moved to evangelical churches. This resulted in Mainline Protestant churches holding liberal attitudes toward abortion and Evangelical Protestants holding more conservative attitudes toward abortion (Evans, 2002). Given Evan's (2002) finding, one might assume that demographic shifts account for the varying attitudes about abortion both within denominations and across denominations. However, another study has found that beliefs are more influential than demographic subgroup. Ellison, Echevarria, and Smith (2005) found that among Christian Hispanics, those individuals who are committed attendees of the most Conservative Protestant churches tended to be the strongest supporters of a complete ban on abortion. These committed Protestants are more staunch in their attitudes toward abortion than Catholic Hispanics. Catholic Hispanics tend to be pro-life, but also endorse abortion policies that make exceptions for cases of rape, incest, and the influence of a pregnancy on the mother's health. Those less committed Catholics and Protestants do not differ significantly from Hispanics who are religiously unaffiliated in their views about abortion. The authors conclude that religious (rather than demographic) factors are very important in influencing attitudes about abortion (Ellison, Echevarria, & Smith, 2005).

Indeed, a number of studies have documented associations between church attendance and abortion attitudes. Greater frequency of church attendance has been found to be associated with less support for abortion (Harris & Mills, 1985). Davidson, Moore, & Ullstrup (2004) found that women who attend church on a monthly or yearly basis are more supportive of abortion within the first trimester of a pregnancy compared to women who attended church on a weekly basis. In addition, other studies have found support for a relationship between strength of an individual's faith and abortion attitudes. Greater faith is associated with more negative attitudes toward abortion (Harris & Mills, 1985). Another study documents a relationship between being

affiliated with a more proscriptive faith – a faith that clearly defines what is wrong – and greater opposition to legalizing abortion (Cochran, Chamlin, Beegley, Harnden, & Blackwell, 1996).

There is also a complex interaction between the influence of education and religiosity on abortion attitudes. Greater education has been found to be associated with more tolerant attitudes toward abortion. However, the influence of more education is greater among individuals who are religious liberals compared to religious conservatives and Catholics. Conservative religious faith and behavior serves as buffer against the liberalizing influence of education. Education has a greater liberalizing influence on individuals who attend church less frequently. The differences were most pronounced among religious conservatives. Religious conservatives who attend church infrequently were more influenced by education than were religious conservative who attended church frequently. Church attendance did not mediate against the liberalizing effects of education on attitudes toward abortion among religious liberals. Moreover, the effect of education among infrequent church attendees did not differ significantly by religious affiliation. Greater contact with peers through frequent church attendance demonstrates the importance of the influence of peers on attitudes toward abortion (Peterson, 2001).

This literature finds that denomination and church attendance are associated with abortion attitudes. However, education emerges as an influential factor in the examination of the relationship, but education did not influence all individuals in the same way. Rather, education resulted in more permissive attitudes toward abortion among religious liberals but not among religious conservatives. While education may influence attitudes toward abortion, race does not turn out to be associated with abortion attitudes. Instead, after accounting for belief system and degree of conservatism, race was not associated with varying abortion attitudes. Clearly, this illustrates the need to consider how attitudes may vary by demographics.

Death Anxiety

There has been much debate in the literature over the exact nature of the relationship between religiosity and death anxiety. A number of studies have indicated a linear relationship between religiosity and death anxiety and others have indicated a curvilinear relationship. Being more religious has been found to be associated with lower levels of death anxiety (Thorson & Powell, 1990). Among those studies that have found a curvilinear relationship between religiosity and death anxiety, individuals with low and high levels of religiosity have had lower levels of death anxiety compared to those individuals who were moderately religious (Wink &

Scott, 2005). This pattern suggests that either strong belief or disbelief in religiosity is related to lower levels of death anxiety. Wink & Scott (2005) found that an interaction between type of afterlife belief and level of religiosity better predicted levels of death anxiety. Individuals who believed in a rewarding afterlife and had lower levels of religiousness tended to score higher on death anxiety measures. Those who did not believe in a rewarding afterlife and were low on religiosity scored second highest on death anxiety measures and those individuals who believed in a rewarding afterlife and were highly religious had the lowest scores on death anxiety measures (Wink & Scott, 2005).

The effects of intrinsic religiousness (beliefs) and extrinsic religiousness (practices and rituals) on death anxiety have also been explored. Extrinsic religiosity has been found to be positively related to death anxiety and death avoidance (Ardelt, 2003) and intrinsic religiosity has been found to be negatively correlated to death anxiety (Powell & Thorson, 1991; Falkenhain & Handal, 2003), suggesting that religious behaviors may be related to greater death anxiety and strong religious beliefs are associated with lower levels of death anxiety. These findings may be tapping the relationship between proscriptive faith and varying attitudes. More proscriptive faiths would outline intrinsic beliefs on a wider range of issues and in greater depth. Having stronger intrinsic beliefs (or greater proscriptive faith) may protect against doubts about life after death. Faiths that emphasize that one can know in this life where one will spend eternity allow a person a greater sense of security that may result in less anxiety about death compared to a faith that teaches that we cannot know our fate until after death. Following from this logic, the extent to which a person believes also seems to be important. A number of studies have suggested that greater strength of religious belief is associated with lower levels of anxiety (Wink & Scott, 2005; Harding, Flannelly, Weaver, & Costa, 2005). This seems to be true for whatever the belief, even when the conviction is nonbelief (Wink & Scott, 2005).

Denominational differences are also evident in the relationship between religiosity and death anxiety. Among Catholics, extrinsic religiosity (behaviors and practices) is negatively correlated with death anxiety. Intrinsic religiosity, however, is not correlated with death anxiety among Catholics. Among Protestants a different pattern emerged; intrinsic religiosity was more strongly related to death anxiety. More simply put, religion moderated the influence of intrinsic religiosity on death anxiety (Cohen, Pierce, Chambers, Meade, Gorvine, & Koenig, 2005).

Variation in conceptualizing and measuring religiosity has proven to be important in predicting attitudes and fears about death. Harding, Flannelly, Weaver, & Costa (2005) used four different measures of religiosity to assess religion's relationship with death anxiety and death acceptance. Ritual religiosity included frequency of prayer and attendance of religious services. Experiential religiosity was measured by how religious a person feels and how much comfort and security he or she draws from his or her religiosity. Consequential religiosity was measured by how much influence religion had on a person's daily life and their choices. Theological religiosity was measured by the degree to which a person believed in God and the afterlife. Only theological religiosity had a significant influence on both death anxiety and death acceptance. Greater theological religiosity was associated with less death anxiety and greater acceptance of death (Harding, Flannelly, Weaver, & Costa, 2005).

Theological religiosity may also be another measure of proscriptive faith. We already know that greater intrinsic religiosity, evidenced by more extensive and detailed beliefs, is associated with less death anxiety. Theological religiosity in Harding, Flannelly, Weaver, and Costa's (2005) research was measured with only two specific beliefs: whether or not there is a God and whether or not there is an afterlife. This is the only one of the researcher's measures that examines the relationship between specific beliefs and death anxiety. Knowing that there is a God and a belief in an afterlife is associated with lower death anxiety compared to not believing in God or an afterlife. Interestingly, the comfort and security one gets from beliefs as measured by the experiential scale is not significant. It seems it is the very beliefs, in and of themselves, rather than any comfort derived from them, that are associated with lower levels of death anxiety. The pattern across all of the studies point to the fact there may be some relationship between specific beliefs and attitudes toward issues of life and death. It is thus reasonable to assume that there may be a relationship between specific Christian beliefs and attitudes about aging.

Aging and the Aged in Scripture

The Christian faith is based on the teachings in the Bible; therefore it is fitting to begin the examination of the relationship between Christian belief and attitudes about aging with beliefs as proscribed by Christian interpretation of the Bible. In the Old Testament, old age is a reward for faithfulness to God and, in a number of cases, faithful aged individuals are spared from the natural consequences of old age or are blessed with gifts the old age would not

normally afford individuals. Abraham was one-hundred years old and Sarah was ninety years old when Isaac was born (Genesis 18:11-14). Moses lived to be 120 and Scriptures note that he never suffered from blindness or weakened physical strength (Deuteronomy 34:7). Enoch lived for 365 years and was taken into heaven to be with God without suffering a physical death (Genesis 5:22-23). Not all individuals are spared from the physical declines of aging. Isaac suffered from blindness (Genesis 27:1-4), loss of sexual desire (1 Kings 1:1-4), inability to conceive (Genesis 18:13), and difficulties of the feet (1 Kings 15:23). Although a long life is a reward from God, aging does not occur without physical decline. Nevertheless, all these troubles are not outside of God's plan but are known by Him before our existence (Psalm 139) (Klapp, 2003). Scripture states that all difficulties are for our ultimate good and for God's glory. Difficulties teach us to rely on God and trust in his sovereign will. Through trials we become closer to God and more Christ-like and thank God for suffering (Hebrews 12:8-11).

Not only does the Old Testament depict old age as a reward for faithfulness, Scripture also demands respect for the aged. Failure to respect one's elder has severe punishment in the Old Testament. For the disrespect of Elisha the prophet, forty-two boys were mauled by bears (2 Kings 2:23). Even at times when God punished His chosen people in Isaiah 47 by allowing the Babylonians to rule over them, the Babylonians incurred God's wrath because they failed to treat the Jewish elders with respect. Moreover, disrespecting one's elders is deserving of the most severe punishment. Disrespect for elders is deserving of death (Proverbs 20:20, 22:22-23) (Klapp, 2003). There is a shift from the arbitrarily appointed rule to respect one's elders in the Old Testament to a more egalitarian purpose for every individual regardless of age in the New Testament.

In the New Testament books of Titus and Hebrews, there are clear marks of character and responsibilities for older men and older women. Older women are specifically commanded to teach younger women how to be good stewards of their husbands and children (Titus 2:3-5). Likewise in 1 Timothy, the responsibilities and character requirements are outlined for those men and women of a marriable age. Timothy is warned about those individuals who might look down upon him because of his young age (Klapp, 2003). Under this new plan every person has a purpose, but this does not invalidate the God's law in the Old Testament. Klapp (2003) states, "The continuity with the Law of Moses remains as the commandment to honor mother and father, intact and complete with its unique promise, is transferred into the New Church" (p. 75).

There is no greater illustration of the intact Law of Moses than Jesus' concern for his own mother even while suffering His punishment upon the cross. He entrusts his mother's care to His disciple John (John 19:26-27). John's response is to immediately take Mary in (Klapp, 2003).

As the basis for conservative Christian beliefs, the Bible provides several examples of the ways in which specific beliefs might be related to attitudes about aging. Specifically, the notion that old age is a reward, that respect for elders is expected, and that there are clear and meaningful roles for older people, could suggest that ascribing to Christian beliefs would be related to positive attitudes about aging.

Three important ideas are evident in the literature. First, specific religious beliefs do have a relationship with various attitudes; however, only a handful of specific beliefs are represented out of the vast array of types of Christian belief that exist. Second, frequency of church attendance is related to various attitudes and beliefs in all the studies except one. In this one case, after controlling for specific religious beliefs, church attendance becomes nonsignificant. Third, education has a unique relationship with various attitudes. It seems that the effects of education are not universally applicable to all individuals; rather, the effect varies by degree of religious conservatism. To add to the literature, this research will examine the relationship between degree of acceptance of specific type of Christian beliefs and attitudes toward aging. In addition, this research will investigate the association of church attendance and education with attitudes toward aging.

CHAPTER III

Research Questions

This research builds upon existing literature. Since attitudes vary by belief system, denomination, and even within denomination, a religious belief scale containing four subscales, fundamentalism, puritanism, orthodoxy, and humanism was used to measure religiosity. The main research question is, "How do specific kinds of Christian belief influence attitudes toward personal aging?" To answer the main research question three other questions must be addressed. First, "Do attitudes toward personal aging vary gender, age, education, frequency of church attendance, or denominational affiliation?" Second, "Are the measures of specific types of religious beliefs influenced by age, gender, education, frequency of church attendance or denominational affiliation?" Third, is the relationship between specific religious beliefs and attitudes toward aging affected by any of the demographic variables, by church attendance, or by denomination?

Method

Church leaders of Lutheran, Presbyterian, Methodist and Baptist congregations in Southwest Ohio were contacted and invited to participate in the study. Church leaders gave written permission for the researcher to recruit from their respective church congregations. While Methodist churches were invited to participate in the study, none accepted the invitation. The final sample included four Baptist churches, two Presbyterian churches, and two Lutheran churches. One Baptist church can be described as an independent fundamentalist church, two are Southern Baptist churches, and the last is an independent conservative Baptist church. Both Presbyterian churches are members of the Presbyterian Church USA. One Lutheran church belongs to the Lutheran Church Missouri Synod (LCMS), a more conservative Lutheran denomination. The second Lutheran church belongs to the Evangelical Lutheran Church in America (ELCA), a less conservative Lutheran denomination.

Church leaders requested a certain number of questionnaires based upon the size of the congregation and their own intuition about the number of congregants who would be willing to participate. Questionnaires were delivered to the church leaders with addressed and postage-paid envelopes. Church leaders were also provided with a short summary about the nature of the investigation to provide to interested congregants. The information and the questionnaires were

distributed in the manner deemed appropriate by the church leader. One church leader indicated that the opportunity to fill out the questionnaires would be announced and the questionnaires distributed at a congregational meal. Other church leaders indicated that an announcement would be printed in the church bulletin and the questionnaires would be made available for pick up in a place convenient for those interested. Questionnaires could then be filled out at a place and time where the participant felt most comfortable.

In total, 310 questionnaires were distributed. One-hundred and forty questionnaires in all were distributed amongst the four Baptist churches. Fifty questionnaires were provided to the fundamentalist Baptist church, fifty to the two Southern Baptist churches, and forty to the conservative independent Baptist church. Seventy-five questionnaires were distributed to the Presbyterian churches. Fifty questionnaires were distributed to the LCMS church and forty-five to the ELCA church. Ninety-five questionnaires were distributed to Lutheran churches in all.   In total 184 questionnaires were returned, making the response rate 59.35%. After eliminating the five cases where individuals did not respond to 20% percent or more of the items on the Religious Belief Inventory (RBI) and the Reactions to Aging Questionnaire (RAQ), 179 cases remained. One case was removed because the individual was under the age of 18, bringing the total number of cases to 178 and the response rate to 57.42%. After accounting for the missing data, Baptists had a 58.57% response rate, Lutherans had a 44.21% response rate, and Presbyterians had a 72% response rate.

Measures

The questionnaires inquired about the participants' age, race, sex, education, denomination, work status, in addition to the following two inventories. See the appendix for the complete questionnaire.

Religious Belief Inventory

Lee (1965) hypothesized that the Christian church, over time, has produced several major theological frameworks that have shaped types of Christian beliefs. Lee identifies seven theological frameworks: fundamentalism (i.e., the emphasis of inspiration, inerrancy, and authority of Scripture), orthodoxy (i.e., an equal emphasis on the importance of orthopraxy and orthodoxy so that the tradition of the church is as important as Scripture), humanism (i.e., the rejection of the Christian doctrine of original sin and the acceptance of the thought that people are basically good), scientism (i.e., the acceptance of empirical study over Scripture and the

traditional doctrine of the church), puritanism (i.e. emphasizes the importance of living rightly or purely as much as the acceptance of traditional Christian beliefs), pietism (i.e., an emphasis on living rightly or purely as evidence of one's faith), and liberalism (i.e. Christian belief is valid and true because it has meaning to each individual; beliefs are not constrained or invalidated by doctrine). Taken together these seven domains reflect religious trends and the progression of theological thought throughout history.

In preliminary scale development work, Lee found only three of the subscales to be reliable. Upon revision, the fundamentalism, orthodoxy, humanism, and puritanism scales were found to be reliable with Guttman's reproducibility coefficients of 0.93, 0.88, 0.88, and 0.94, respectively. Upon further testing, four subscales were also found to be valid measures of belief within the Christian faith (Thurston, 1999). Only these four subscales (i.e., fundamentalism, orthodoxy, humanism, puritanism) were used in this research. Each subscale consists of eight items, and half of the items on each scale are reverse scored. Response categories for each item range on a five point Likert scale ranging from "strongly agree" to "strongly disagree." Possible scores for each subscale scale range from 0 to 32, with higher scores indicate greater agreement with that type of belief. Each participant receives a score on each of these dimensions.

Items on the questionnaire were made more gender inclusive. Items that referred to individuals as "men" were changed to "people." Other items that referred only to males with the pronoun "he" were changed to "he/she." Missing data by item was minimal on the RBI. The mean was substituted on each item. The items on the RBI subscales were scored by summing the items corresponding with the fundamentalism, orthodoxy, puritanism, and humanism subscales. For both negatively and positively coded statements items were scored so that the higher score was associated with stronger agreement. The items on the RBI have been labeled according to which subscale each item belongs.

Observed scores on the fundamentalism, orthodoxy, puritanism, and humanism subscales ranged from 4 to 32, 10 to 32, 3 to 31, and 0 to 24 and with means of 25.31, 12.79, 25.53, 18.17, respectively.

<u>Reactions to Aging Questionnaire</u>

Attitudes toward aging was assessed using Community Disability and Ageing Program (at the University of Sydney)'s (1995) Reactions to Ageing Questionnaire (RAQ). The RAQ measures attitudes toward personal aging. The RAQ was originally used to explore nurses'

attitudes about their own aging. Specifically, the RAQ was designed in response to the observation that literature has focused on attitudes toward aging at a societal level; that is, a reaction toward aging in general and not to one's own aging. RAQ items were developed from the written answers of 60 nurses responding to an open-ended question about how they felt about their own aging. The initial version of the questionnaire consisted of thirty-five questions on which respondents indicated his or her agreement with each statement using a six point Likert scale. The scale was first tested on a number of registered nurses, as well as individuals drawn from the general population. Based on the results of the preliminary tests, the RAQ was revised, and the final version now includes 27 items, each which can be responded to on a six point Likert scale ranging from "I disagree very much" to "I agree very much." Scores may range from 27 to 162, with higher scores indicating a more positive attitude toward one's own aging. In tests of the Australian population, the RAQ has been found to be internally consistent on four separate occasions with a Cronbach's alpha ranging from 0.86 to 0.89. RAQ has also demonstrated construct validity. There are moderate, but significant correlations between the RAQ and scales that measure attitudes toward aging at the societal level (Gething et al., 2004; Community Disability & Ageing Program, 1995).

Independent Variables

Church denomination, years of education, church attendance, age, and gender were included on the questionnaire, because of their importance in previous research. Church denomination and gender were asked with categorical responses. The survey asked for exact age and exact years of education. Church attendance was asked with eight possible response categories: less than six times a year, between 6 and 11 times a year, once a month, a couple times a month, three times a month, once a week, between 2 and 6 times a week, and daily.

Recoding was necessary because of missing data, distribution of responses across categories for some variables, and to facilitate data analysis. The four cases of missing data on *church denomination* were substituted for modally, with Baptists (N = 78) outnumbering Lutherans (N = 42) and Presbyterians (N = 54). Missing data was minimal for the other independent variables. The variable, *years of education*, had four missing values. The mean of the years of education was substituted for these cases. *Age*, *church attendance*, and *gender* had no missing data. For the purpose of crosstabulations, years of education was recoded into the following three dummy coded variables: *no college* (0-12 years of education), *some college* (13-

15 years of education), *and college grad* (16+ years of education). Church attendance was recoded into the following three dummy coded variables: *less than once a week, once a week, more than once a week* based on the conceptual meaning of the responses and the observed distribution.

<u>Dependent Variable</u>

The Reactions to Aging Questionnaire (RAQ) summary scores ranged from 60 to 162, with a mean of 111.55. The RAQ score was dummy coded into *high RAQ score* to run crosstabulations using the observed mean.

CHAPTER IV

Results

<u>Descriptives</u>

       The age of participants range from 18 to 93 and have a mean of 57 years and a standard deviation of 18 years. The sample is 40 percent male and 60 percent female. Years of education range from 8 to 23 years, with a mean of 15 years. Twenty-seven percent of the sample has no college education, 12% has some college education, and 58% are college graduates. Forty-six percent of the sample is Baptist, 30 percent is Presbyterian, and 24 percent is Lutheran. Forty-nine percent of the sample reports attending church more than once a week, 40% report attending church once a week, and only 11 percent report attending church less than once a week. Fifty-five percent has high RAQ scores (positive attitudes toward personal aging) and 45% has low RAQ scores (negative attitudes toward personal aging) (Table 1). The mean RAQ score is 111 (SD=19) and varied by RBI subscale. Those individuals scoring low on fundamentalism have a mean RAQ score of 106 (SD = 16) and those scoring high on fundamentalism have a mean RAQ score of 116 (SD=19). Low scorers on orthodoxy have a mean RAQ score of 105 (SD = 17) and high scorers on orthodoxy have a mean score of 117 (SD = 18). Those individuals who scored low on puritanism have a mean RAQ score of 108 (SD=18) and individuals who scored high on puritanism have a mean score of 116 (SD=19). Finally, individuals scoring low on humanism have a mean RAQ score of 116 (SD=19) and individuals who scored high on humanism have a mean score of 108 (SD=17).

Table 1. Sample Descriptives (N=178)	
	%
Gender	
Male	40.4
Female	59.6
Education	
No college	27.0
Some College	12.4
College Graduate	58.4
Denomination	
Baptist	46.1
Presbyterian	30.3
Lutheran	23.6
Frequency of Church Attendance	
Attend church more than once a week	49.4
Attend church once a week	39.9
Attend church less than once a week	10.7
RAQ Score	
High RAQ Score (positive attitudes toward personal aging)	54.5
Low RAQ Score (negative attitudes toward personal aging)	45.5

Is there a relationship between types of religious beliefs and attitudes toward aging?

The Religious Belief Inventory subscales are used to measure four types of religious beliefs; fundamentalism, orthodoxy, puritanism, and humanism. Correlational analysis suggests that there is indeed a relationship between these four types of beliefs and attitudes toward personal aging, as shown in Table 2. The four RBI subscales are significantly correlated with RAQ scores. Orthodoxy has a correlation of 0.323, followed by fundamentalism with a correlation of 0.308, and puritanism with a correlation of 0.218 with RAQ scores, all significant

at the 0.01 level. Greater scores on these three scales are correlated with higher scores on the RAQ, suggesting that higher degree of acceptance of these sets of beliefs are related to more positive attitudes toward aging. Orthodoxy is most highly correlated with more positive attitudes toward personal aging. The orthodoxy scale included items such as, "We can't be reconciled to God except by Christ's atoning work on the cross" and "We are saved by God's grace, through faith, without any merit of our own." Second most highly correlated with positive more positive attitudes toward personal aging is fundamentalism, followed by humanism, and puritanism. Humanism is negatively correlated with RAQ scores, suggesting that humanist beliefs are associated with more negative attitudes toward personal aging. Items on the humanism scale included items such as, "People are not sinful, merely foolish" and "People have proved adequate as the central concern of society."

Table 2. Correlations Between RBI Subscales and RAQ Scores (N=178)	
RBI Subscale	RAQ Scores
Fundamentalism	0.308 **
Orthodoxy	0.323 **
Puritanism	0.218 **
Humanism	- 0.280 **
**p<0.01	

Since all four subscales yielded moderate correlations with RAQ scores, it is also useful to look at the relationship between the subscales themselves. If the subscales are highly correlated with other, it may be an indication that the subscales may not be measuring different concepts. Table 3 documents these correlations.

Fundamentalism scores have a -0.533 correlation with humanism scores, a 0.646 correlation with orthodoxy scores, and 0.510 correlation with puritanism scores. Orthodoxy scores have a -0.449 correlation with humanism scores and a 0.396 correlation with puritanism scores. Puritanism scores have a -0.521 correlation with humanism scores (See Table 3). All of these correlations are significant at the 0.01 level.

Table 3. Correlations Between Religious Belief Subscale Scores (N=178)			
RBI Subscale	RBI Subscale		
	Humanism	Fundamentalism	Orthodoxy
Fundamentalism	- 0.533**	1	
Orthodoxy	- 0.449**	0.646**	1
Puritanism	- 0.521**	0.510**	0.396**
*p<0.05, **p<0.01			

The moderate to high positive correlations among fundamentalism, orthodoxy, and puritanism may suggest that these three subscales are related to an underlying construct, such as conservative Christian belief. While these three subscales may all be related to conservative Christian belief, they are conceptually distinct sets of beliefs. For example, fundamentalism stresses the inspiration, inerrancy, and authority of Scripture; orthodoxy places an equal emphasis on teaching (orthodoxy) and practice (orthopraxy); and puritanism stresses living a pure and moral life. That each of the three Christian belief subscales is conceptually distinct and has a different degree of correlation with attitude toward aging supports the logic of keeping the subscales separate in further analyses.

In order to rule out any mediating or confounding variables that may account for the high significance of the correlations between the RBI subscales and the RAQ scores, several other independent variables are included. Some of these are demographic variables (age and gender), whereas other variables that emerged from the literature as being important in understanding the relationship between religious beliefs and various attitudes (i.e., education, frequency of church attendance, and denomination).

Is gender or age significantly correlated with the RBI subscales or the RAQ scores?

        Correlations between the demographic variables (age and gender) and RBI subscale scores as well as RAQ scores are shown in Table 4. Results show that age is significantly correlated with fundamentalism (r= -0.239). Gender had a weak but significant correlation with fundamentalism, and a 0.231 correlation with the humanism (significant at the 0.01 level). These findings suggest that higher fundamentalism scores are associated with younger age. In addition, being male is correlated with higher fundamentalism scores; being female is associated with higher humanism scores.

Table 4. Correlations Between Demographic Variables and RBI subscales and RAQ Scores (N=178)					
	RBI Subscales				
Demographic Variables	Fundamentalism	Orthodoxy	Puritanism	Humanism	RAQ Scores
Age	- 0.239 **	- 0.132	-0.021	0.057	- 0.118
Gender (0=male)	- 0.151 *	- 0.105	- 0.100	0.231 **	- 0.116
*p<0.05, **p<0.01 N = 178					

Are years of education significantly correlated with RBI subscales or RAQ scores?

        Correlations among three dummy-coded education variables and the RBI subscales are shown in Table 5. The "some college" level of education was not significantly correlated with any of the RBI subscales. The humanism subscale was not significantly correlated with any of the educational levels. The highest correlations were between the remaining three RBI subscales (fundamentalism, orthodoxy, and puritanism) and being a college graduate. Puritanism has a -0.457 correlation, fundamentalism a -0.365 correlation, and orthodoxy a -0.206 correlation with being a college graduate, all significant at the 0.01 level. Degree of acceptance of beliefs along these three dimensions was negatively associated with having a college education. Conversely, these three subscales are significantly and positively correlated with low education: puritanism has a 0.401 correlation, fundamentalism a 0.322 correlation, and orthodoxy a 0.172 correlation with having no college experience.

Table 5. Correlations Between Religious Belief Subscale Scores and Education Level (N=178)			
RBI Subscale	Education Level		
	No college	Some college	College Grad
Fundamentalism	0.322 **	0.103	- 0.365 **
Orthodoxy	0.172 *	0.072	- 0.206 **
Puritanism	0.401 **	0.040	- 0.457 **
Humanism	- 0.141	0.020	0.141
*p<0.05, **p<0.01			

While education and the RBI subscales were significantly correlated with each other, education was not significantly correlated with RAQ scores. This seems to suggest that education may act as a confounding variable, influencing RBI subscales and resulting in complicated relationships between RBI subscales and RAQ scores. The link between education and RBI subscales may also mask a possible relationship between education and RAQ. For this reason, educational attainment will be included in multivariate analyses.

Is frequency of church attendance significantly correlated with RBI subscales or RAQ scores?

The RBI subscales are correlated with frequency of church attendance, as shown in Table 6. The subscales are the most highly correlated with those individuals who reported attending church more than once a week, all significant at the 0.01 level. Fundamentalism has a 0.457, orthodoxy a 0.340, puritanism 0.617, and humanism a -0.382 correlation with attending church more than once a week. Thus, the three subscales that are related to conservative Christian beliefs are positively correlated with attending church more than once a week, while humanism is negatively correlated with that particular aspect of religious behavior, and positively associated with attending church less than once a week. The relationship between RBI subscales and attending church more than once a week will be examined further because of its particularly high correlations.

Table 6. Correlations Between Religious Belief Subscale Scores and Church Attendance (N=178)			
RBI Subscale	Frequency of Church Attendance		
	< once a week	Once a week	> once a week
Fundamentalism	- 0.268 **	- 0.298 **	0.457 **
Orthodoxy	- 0.308 **	- 0.153 *	0.340 **
Puritanism	- 0.305 **	- 0.438 **	0.617 **
Humanism	0.162 *	0.288 **	- 0.382 **
*p<0.05, **p<0.01			

Is denominational affiliation correlated with RBI subscales or RAQ scores?

There are significant relationships between the RBI subscales and denominational affiliation, as shown in Table 7. Fundamentalism has 0.539 correlation with being Baptist, a -0.237 correlation with being Presbyterian, and a -0.0376 with being Lutheran. Orthodoxy has a 0.356 correlation with being Baptist, a -0.192 correlation with being Presbyterian, and a -0.210 correlation with being Lutheran. Puritanism has a 0.667 correlation with being Baptist, a -0.370 with being Presbyterian, and a -0.382 correlation with being Lutheran. Humanism has a -0.459 correlation with being Baptist, a 0.328 correlation with being Presbyterian, and 0.184 correlation with being Lutheran. In sum, being Presbyterian and Lutheran was negatively correlated with all the RBI subscales except for Humanism, and being Baptists was positively correlated with all the RBI subscales except for Humanism.

Table 7. Correlations Between Religious Belief Subscale Scores and Denomination (N=178)			
RBI Subscale	Denomination		
	Baptist	Presbyterian	Lutheran
Fundamentalism	0.539 **	- 0.237 **	- 0.376 **
Orthodoxy	0.356 **	- 0.192 *	- 0.210 **
Puritanism	0.667 **	- 0.370 **	- 0.382 **
Humanism	- 0.459 **	0.328 **	0.184 *
*p<0.05, **p<0.01			

While less impressive than the relationship between denomination and the RBI subscales, there is an interesting relationship between denomination and RAQ Scores. The highest correlation is between RAQ score and being Baptist. Being Baptist is associated with having more positive views about personal aging, significant at the 0.01 level. Lutherans on the other hand have a - 0.180 correlation with RAQ scores. Being Lutheran is associated with less positive attitudes towards personal aging. Finally, there appears to be no correlation between being Presbyterian and RAQ scores (Table 8).

Table 8. Correlations Between RAQ Scores and Denomination (N=178)			
	Denomination		
	Baptist	Presbyterian	Lutheran
RAQ Score	0.228 **	-0.081	-.180 *
*p<0.05, **p<0.01			

There is a complex relationship among denomination, demographic variables, church attendance, RBI subscales, and RAQ scores. Because of the high correlation between the denominations and the RBI subscales, denomination will not be included in the regression model. However, the interrelationships among all of the other variables and the RAQ scales will be analyzed through regression models in the following section.

<u>Regression</u>

Since the four RBI subscales were highly correlated, the impact of each of these belief systems on attitudes toward aging is assessed in separate models. In Model 1, age, gender, years of education, attending church more than once a week, and fundamentalism score were entered as predictors of attitudes toward personal aging. In Model 2, age, gender, years of education, attending church more than once a week, and orthodoxy score were entered as predictors of attitudes toward personal aging. In Model 3, age, gender, years of education, attending church more than once a week, and humanism score were entered as predictors of attitudes toward personal aging. In Model 4, age, gender, years of education, attending church more than once a week, and puritanism score were entered as predictors of attitudes toward personal aging.

In Model 1 (Table 9), the fundamentalism score is the only significant predictor of attitudes toward personal aging. For every one unit increase in the fundamentalism score, on average, there is a 0.888 unit increase in RAQ score (significant at the 0.001 level). A more positive fundamentalism score is associated with more positive attitudes toward personal aging, even when the effects of frequent church attendance, gender, education, and age are held constant. While this effect is significant, Model 1 accounts for only 10.7% of the variance in attitudes toward personal aging.

Table 9. Attitudes Toward Personal Aging Regressed on Fundamentalist Religious Belief Controlling for Demographic Characteristics (Age & Gender), Educational Attainment, and Church Attendance (N=178)			
	Model 1		
Variable	*b*	*Beta*	*p value*
Age (in years)	- 0.035	- 0.034	0.657
Gender (female = 1)	- 2.687	- 0.070	0.372
Education (in years)	0.235	0.034	0.684
Attend Church More Than Once A Week	3.186	0.085	0.311
Fundamentalism Score	0.888 ***	0.261	0.004
Constant	87.561		0.000
R^2	0.107		
*p<0.05 **p<0.01, ***p<0.001			

In Model 2 (Table 10), the orthodoxy score is the only significant predictor of attitudes toward personal aging out of the independent variables in the model. For every one unit increase in the orthodoxy score there is, on average, a 1.154 increase in RAQ score (significant at the 0.001 level). A more positive orthodoxy score is associated with more positive attitudes toward personal aging. Model 2, consisting of age, gender, education, attending church more than once a week, and orthodoxy subscale accounts for 12.2% of the variance in attitudes toward personal aging. Model 2 accounts for 1.5% more of the variance than Model 1.

Table 10. Attitudes Toward Personal Aging Regressed on Orthodox Religious Belief Controlling for Demographic Characteristics (Age & Gender), Educational Attainment, and Church Attendance (N=178)

Variable	Model 2		
	b	*Beta*	*p value*
Age (in years)	- 0.061	- 0.060	0.425
Gender (female = 1)	- 3.614	- 0.095	0.214
Education (in years)	- 0.109	- 0.016	0.841
Attend Church More Than Once A Week	3.529	0.095	0.246
Orthodoxy Score	1.154 ***	0.264	0.001
Constant	87.749		
R^2	0.122		
*p<0.05, **p<0.01, ***p<0.001			

In Model 3 (Table 11), the humanism score is the only significant predictor of attitudes toward personal aging out of the independent variables in the model. For every one unit increase in the humanism score there is, on average, a 0.898 decrease in RAQ score (significant at the 0.001 level). A more positive humanism score is associated with more negative attitudes toward personal aging. Model 3, consisting of age, gender, education, attending church more than once a week, and humanism subscale accounts for 8.2% of the variance in attitudes toward personal aging.

Table 11. Attitudes Toward Personal Aging Regressed on Humanistic Religious Belief Controlling for Demographic Characteristics (Age & Gender), Educational Attainment, and Church Attendance (N=178)			
	Model 3		
Variable	*b*	*Beta*	*p value*
Age (in years)	- 0.084	- 0.082	0.277
Gender (female = 1)	- 2.909	- 0.094	0.332
Education (in years)	- 0.225	- 0.033	0.679
Attend Church More Than Once A Week	3.125	0.084	0.323
Humanism Score	- 0.898 ***	- 0.233	0.005
Constant	123.391		
R^2	0.082		
*p<0.05, **p<0.01, ***p<0.001			

Table 12 shows that none of the independent variables in Model 4 are significant predictors of RAQ scores. Puritanism score is not a significant predictor of RAQ scores, even when church attendance and demographic variables are controlled for.

Table 12. Attitudes Toward Personal Aging Regressed on Puritanistic Religious Belief Controlling for Demographic Characteristics (Age & Gender), Educational Attainment, and Church Attendance			
	Model 4		
Variable	*b*	*Beta*	*p value*
Age (in years)	- 0.094	- 0.092	0.236
Gender (female = 1)	- 4.209	- 0.110	0.160
Education (in years)	- 0.024	- 0.004	0.967
Attend Church More Than Once A Week	2.824	0.076	0.444
Puritanism Score	0.481	0.165	0.106
Constant	109.820		
R^2	0.077		
*p<0.05, **p<0.01, ***p<0.001 N = 178			

A number of interesting relationships emerged in this study. Age was negatively correlated with fundamentalism. Attending church more than once a week was correlated most high with the puritanism subscale. Being a college graduate was correlated with Puritanism subscale most highly out of all the RBI subscales, in a negative direction. While these two bivariate relationships yielded some of the highest correlations, when included in the multivariate regression, neither attending church more than once a week nor education were significant predictors of attitudes toward personal aging. In fact, age, gender, education, and attending church more than once a week were not significant predictors of attitudes toward personal aging in any of the regression models.

Puritanism was highly correlated with orthodoxy, fundamentalism, and humanism subscales, but puritanism was not a significant predictor of attitudes toward aging. The puritanism subscale, even though significantly correlated with attitudes toward personal aging,

did not emerge as significant predictors when controlling for the other independent variable (age, gender, education, and attending church more than once a week). The high correlations among the fundamentalism, orthodoxy, and puritanism subscales seemed to indicate that these three subscales were measures of conservative Christian belief, however, of these three variables only fundamentalism and orthodoxy emerged as significant predictors of attitudes toward personal aging. Higher scores on fundamentalism and orthodoxy subscales were associated with more positive attitudes toward aging

The humanism subscale was negatively correlated with all three of the other subscales. Scoring highly on humanism is associated with more negative attitudes toward personal aging. Like the fundamentalism and orthodoxy model, however, none of the other independent variables were significant predictors of attitudes toward personal aging. This model accounted for less of the variance than the model regressed on fundamentalism or orthodoxy. Fundamentalist, Orthodox, and Humanistic belief have a unique relationship with attitudes toward aging. The nature of this relationship will be explored in the concluding chapter.

Chapter V

Discussion

This study adds to the literature on religiosity by documenting a correlation between one aspect of religiosity and attitudes toward aging; this relationship had not been explored in previous research. Specifically, this research examined the link between various kinds of religious beliefs (fundamentalism, orthodoxy, puritanism, and humanism) and attitudes about a person's own aging. The literature clearly indicates that religiosity influences various attitudes. More specifically, Harding, Flannelly, Weaver, and Costa (2005) demonstrated that specific religious beliefs are significant predictors of death anxiety when other measures of religiosity, including church attendance, are not significant predictors. Harding et al.'s article addressed attitudes of a personal nature, one's own anxiety and acceptance of death. Given that measures of death anxiety often measure aging anxiety, it is reasonable to believe that religious belief may influence attitudes toward personal aging (Benton, Christopher, & Walter, 2007). In addition, Christian doctrine is based or justified in the Bible. A short review of what the Bible says about aging and the aged documents the respect people are to have for their elders. Not only is the elder to be respected, but living a long life is viewed as a reward, not a punishment (Klapp, 2003). For Christians who read the Bible literally it is not surprising that they might view their own aging in a positive light.

The impact of each of these four belief subscales on attitudes toward aging was assessed separately, since they are highly intercorrelated. The major findings of this study suggest that orthodox belief has the greatest influence on attitudes toward personal aging. Fundamentalism and humanism are the only other sets of beliefs that are significant predictors of attitudes toward personal aging. Higher fundamentalism scores are associated with better attitudes toward personal aging and higher humanism scores being associated with more negative attitudes toward personal aging. While puritanism was highly correlated with all the RBI subscales, puritanism is not significant predictor of attitudes toward personal aging. puritanism had the weakest significant correlation with RAQ scores and failed to reach significance in the regression model.

Orthodoxy and fundamentalism may have been significant predictors of personal attitudes toward aging because they address specific doctrine based in the Bible. Both, in a sense, measure to what degree a person's beliefs match Scripture. Essentially, orthodoxy and fundamentalism assess how literally the Bible is interpreted. More humanistic beliefs are in

opposition to Biblical teachings and may account for why humanism is a significant predictor of more negative attitudes toward personal aging. Puritanism may have failed to reach significance because puritanistic beliefs are defined by moral codes that are a response to beliefs based in the Bible. The puritanism subscale is not a good measure of doctrine drawn straight from Scripture.

Previous literature had suggested several variables that might be important in the link between religious beliefs and attitudes about aging. Specifically, this study included age, gender, years of education, attending church more than once a week, and each of the RBI subscales (fundamentalism, orthodoxy, puritanism, and humanism). Being older is typically associated with holding more fundamentalist belief. Likewise gender is also included with males typically holding more fundamentalist belief compared to women. In addition, education has influential mediating effects on religious liberals in their attitudes toward abortion. Among religious liberals, higher education was significantly associated with more favorable attitudes toward abortion. This effect was not evident among religious conservatives (Peterson, 2001). Finally, church attendance has proven to be a good predictor of attitudes and behaviors in previous research. More frequent church attendance is associated more conservative attitudes and behaviors.

The finding of this study supports a significant association between fundamentalism and being younger. Typically, the reverse is true. Being male was associated with higher fundamentalism scores and being female was associated with higher humanism scores. Again in the four regression models, gender was not a significant predictor of attitudes toward aging. Finally, contrary to the mediating effects education had on religious liberals in Peterson's 2001 study, in this study, education does not influence attitudes towards personal aging in a positive or negative way, but it is highly correlated with the religious belief subscales.

Even though there were interesting patterns of correlation among RBI, RAQ, church attendance, and demographic variables, none of these other predictors were significant in the four regression models predicting attitudes toward aging. Type of belief was a better predictor of attitudes toward personal aging than church attendance, which did not predict attitudes toward personal aging. This is similar to the pattern documented by Harding, Flannelly, Weaver, and Costa in their 2005 article on the relationship between religiosity and death anxiety and death acceptance. Using various models of religiosity, they find specific religious beliefs to be the only significant predictor of death anxiety and death acceptance. In spite of the overwhelming support

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for the relationship between church attendance and a variety of attitudes in the literature, the pattern which emerges in this research study seems to support the finding of Harding et al. Given we know that there is a significant relationship between death anxiety and aging anxiety (Benton, Christopher, & Walter, 2007) it may be no coincidence that this research study supports their findings.

While this study does add to the literature on attitudes toward aging and the literature on the impact of religiosity on attitudes and behaviors, there are a number of ways this study could be improved upon. First, the sample is a convenience sample. The sample had unusually conservative religious beliefs which could be corrected by random sampling. Future research in this area should also be sure to include a greater number of participants across more denominations, especially methodists, for whom the Religious Belief Inventory was originally constructed. In addition, a sample with a greater representation of races and ethnicities may also be helpful in understanding the relationship between religiosity and attitudes toward aging. Future research should also investigate the relationship between other belief systems (i.e. Islam, Buddhism, and Judaism) and attitudes toward aging. Comparing the influence of different religions on attitudes toward aging may provide interesting insights into why the aging process and the aged are valued differently throughout the world, but especially in eastern societies compared to western societies.

While the orthodoxy score has the greatest significant influence on attitudes toward personal aging, the model which tested its effects accounts for only 12% of the variation in the dependent variable. Clearly there are other significant predictors of attitudes toward aging; we are left wondering what accounts for the remainder of the variation. Bivariate analysis found a strong correlation between having orthodox or fundamentalist beliefs and attending church more than once a week. It was important to include church attendance in each model to control for this important religious behavior that has been found to be so influential on behavior and attitudes in the literature. By including attending church more than once a week in the models with the orthodox and fundamentalism subscale scores, the impact of orthodoxy and fundamentalism on attitudes toward personal aging may have been underestimated. Future research should also investigate the association between health status and perceived health (both physical and mental) in relation to type of religious belief and attitudes toward aging.

In summary, there is an important relationship between religious belief and attitudes toward aging. When controlling for frequent church attendance, religious belief has a significant influence, whereas religious behavior did not. More Orthodox beliefs yield the greatest influence on more positive attitudes toward personal aging. There is a similar association between more fundamentalist belief and positive attitudes toward aging. Finally, more Humanistic beliefs are associated with more negative attitudes toward personal aging. This study has opened the door for future research concerning how religious beliefs may influence our perception of aging.

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Appendix

MIAMI UNIVERSITY

Christian Beliefs and Attitudes Toward Aging

This research is being conducted by Amanda Lauck as part of the requirements for her master's degree in gerontology at Miami University. For her master's thesis, Amanda is exploring the relationship between religious beliefs and attitudes toward aging. If you are age 18 or older, it would be appreciated if you would complete this questionnaire. The items ask you about your religious beliefs, feelings about aging, and basic demographic information about yourself. The questionnaire should take no more than 20 minutes to complete. You are in no way obligated to participate; participation is on a voluntary basis and it will not be possible to link your answers back to you. Completion and return of the questionnaire in the attached, addressed, postage-paid envelope constitutes your consent to participate in this research.

If you have questions about the procedures used in this research, please contact Amanda Lauck (telephone: 513.593.4598; email: lauckam@muohio.edu) or her research advisor, Dr. Jennifer Kinney (telephone: 513.529.2915; email: kinneyjm@muohio.edu). If you have questions about your rights as a participant in this research project, please contact Miami University's Office for the Advancement of Research and Scholarship (telephone: 513.529.3600; email: humansubjects@muohio.edu).

Please feel free to tear off this page and keep it for your records.

Please begin the questionnaire on the next page

Thank you for taking the time to complete this questionnaire. If any of the items in the questionnaire caused you to think about subjects that bothered or concerned you, please consider contacting one of the resources listed below.

Counseling Contacts

  1. Your minister or another religious leader.

  2. In the Oxford area:

> Community Counseling & Crisis Center
> 110 South College Avenue
> Oxford, Ohio 45056
> (513) 523-4149

  3. For counseling services and referrals throughout the Greater Cincinnati area:

> Family Service Clinical Counseling
> 205 West Fourth Street, Suite 200
> Cincinnati Ohio 45202
> (513) 345-8555

Your Religious Beliefs

Below is a series of statements. Please circle the number that best represents how much you agree/disagree with each statement. There are no right or wrong answers; these are simply beliefs that you may or may not hold.

Items labeled with F belong to the Fundamentalism subscale, P to the Puritanism subscale, O to the Orthodoxy subscale, and H to the Humanism subscale.		How strongly do you agree with the statement?				
		I strongly agree	I agree somewhat	I disagree somewhat	I strongly disagree	I don't have an opinion
1. P	There is nothing intrinsically wrong with smoking.	1	2	3	4	5
2. F	All these modern translations of Scripture present a real threat to the gospel.	1	2	3	4	5
3. F	The Bible is fallible.	1	2	3	4	5
4. P	Life in this world is a constant struggle against evil and wickedness.	1	2	3	4	5
5. F	Adam and Eve are not historical persons.	1	2	3	4	5
6. O	The Bible is principally a record of people's developing thought about God.	1	2	3	4	5
7. H	An open mind is an appealing but unrealistic goal.	1	2	3	4	5
8. H	Authority of the State rests on more than just the consent of the people.	1	2	3	4	5

		How strongly do you agree with the statement?				
		I strongly agree	I agree somewhat	I disagree somewhat	I strongly disagree	I don't have an opinion
9. P	It is a sin to play any sport or do any work on the Sabbath.	1	2	3	4	5
10. H	All major religions teach different basic beliefs.	1	2	3	4	5
11. O	Jesus Christ is the supreme revelation of God; very God of very God.	1	2	3	4	5
12. O	The doctrine of the Trinity has little relevance for the Christian faith.	1	2	3	4	5
13. F	We know that God forgives us our sins because Christ gave his life as a substitute for us.	1	2	3	4	5
14. F	Jesus Christ was born by natural procreation.	1	2	3	4	5
15. O	We can't be reconciled to God except by Christ's atoning work on the cross.	1	2	3	4	5
16. P	Alcohol is a dangerous agent of misery and vice.	1	2	3	4	5
17. P	Card playing is a harmless pastime.	1	2	3	4	5

		How strongly do you agree with the statement?				
		I strongly agree	I agree somewhat	I disagree somewhat	I strongly disagree	I don't have an opinion
18. H	The major function of religion is the integration of personality.	1	2	3	4	5
19. F	After Jesus arose from the dead He walked, talked, and ate with the disciples.	1	2	3	4	5
20. H	People have proved adequate as the central concern of society.	1	2	3	4	5
21. P	Dancing is a normal, healthy social activity.	1	2	3	4	5
22. F	At Cana, Jesus did not literally turn water into wine.	1	2	3	4	5
23. H	People are not sinful, merely foolish	1	2	3	4	5
24. P	Providing a person stays within his/her financial means, gambling is harmless.	1	2	3	4	5
25. F	When Joshua commanded the sun to stand still, it did so.	1	2	3	4	5
26. O	We are saved by God's grace, through faith, without any merit of our own.	1	2	3	4	5
27. O	Our experience of God's salvation on earth is but a foretaste of Heaven.	1	2	3	4	5
28. O	Doctrine is relatively unimportant.	1	2	3	4	5

		How strongly do you agree with the statement?				
		I strongly agree	I agree somewhat	I disagree somewhat	I strongly disagree	I don't have an opinion
29. P	The world is full of demonic forces that seek to control our lives.	1	2	3	4	5
30. O	Original sin is an archaic myth.	1	2	3	4	5
31. H	People are quite incapable or setting and achieving their own goals.	1	2	3	4	5
32. H	The way to build a better society is to appeal to people's reason.	1	2	3	4	5

Your Attitudes About Aging

Reactions to Ageing Questionnaire (RAQ)

Not included at the request of the authors.

Your Demographic Characteristics

This last section asks you about some basic background information about yourself. Please answer the questions to the best of your ability.

1. How old were you on your last birthday? _____ years old.

2. What is your racial/ethnic identity? _____

3. What is your gender? _____

4. What is the name of your current church (if any)? _____

5. What is the denomination of your current church (if any)? _____

6. What denomination do you identify with most (if any)? _____

7. On average, how often do you attend church?

☐ Less than 6 times a year
☐ Between 6 and 11 times a year
☐ Once a month
☐ A couple times a month
☐ Three times a month
☐ Once a week
☐ Between 2 and 6 times a week
☐ Daily

8. How many years of education have you completed? _____

9. Are you currently working (Are you gainfully employed)?

☐ No

        If no, please indicate which of the following best describes your current situation

            ☐ I am retired
            ☐ I have been laid off
            ☐ I am actively looking for work
            ☐ I am a stay at home mom/dad
            ☐ I do not work and I am not currently looking for work
            ☐ Other:_____

☐ Yes

        If yes, please indicate which of the following best describes your current situation

            ☐ I work full time
            ☐ I work part time
            ☐ Other: _____

        AND

        What is your occupation? _____