

Religiosity and Death Anxiety

Ya-Hui Wen, National Taitung University, Taiwan

ABSTRACT

This study explored the relationship between religiosity and death anxiety. One hundred sixty-five church participants filled out the Intrinsic Religious Motivation Scale, the Revised Death Anxiety Scale, and a personal questionnaire. Factor analyses, Pearson correlation, and linear and quadric regression analyses were conducted. The results found a positive relationship between intrinsic religious motivation and frequency of religious service attendance and strength of belief. Findings showed a linear and a quadratic relationship between death anxiety and intrinsic religious motivation.

INTRODUCTION

Humans face the reality of death. Some people are more anxious about death than others are. Richardson, Berman, and Piwowarski (1983) defined death anxiety as a negative feeling a person experiences about death and dying. One factor that may influence an individual's level of death anxiety is the strength of one's religious beliefs (Leming, 1979–1980; Richardson et al.). In a meta-analysis of intrinsic and extrinsic religiousness, Donahue (1985) described several studies that examined the relation between religiosity and death anxiety. Some studies reported positive correlations, some reported negative correlations, and some reported no significant correlations.

Abdel-Khalek & Lester (2009) found no correlation between religiosity and death anxiety. Most studies, however, found lower death anxiety in people with strong, integral religious views and greater in people with more expedient religious beliefs. Many studies found no relation when employing superficial measures of religion. Other studies found that people who possess intrinsic religious motivation have significantly lower levels of various types of death anxiety than people with extrinsic religious motivation have (Clements, 1998; Kraft, Litwin, & Barber, 2001; Martin & Wrightsman, 1965; Minear & Brush, 1980–1981; Richardson et al., 1983; Suhail & Akram, 2002; Templer, 1972).

One study indicated that people who regularly attend religious services have less death anxiety (Duff & Hong, 1995), while another study stressed a strong religious commitment as an important determinant in fear of death (Spilka, Minton, & Sizemore, 1977). By contrast, a few studies related low death anxiety to weak or no religious beliefs (Cole, 1978–1979; Ray & Najman, 1974). This seemingly contradictory finding may stem from a curvilinear relation between religiosity and death anxiety. At least four studies suggested that the relation between religiosity and death anxiety might have a curvilinear component (Aday, 1984–1985; Leming, 1979–1980; McMordie, 1981; Nelson & Cantrell, 1980). While employing psychometrically sound measures of death anxiety, their measures of religiosity were weak. Aday employed frequency of church attendance and a single item measure of religiosity with unknown reliability and validity. McMordie employed a checklist with unknown reliability and validity, where participants rated themselves as extremely religious, very religious, somewhat religious, slightly religious, not at all religious, or anti-religious. Both measures of religious attendance and orthodox Christian beliefs were included in the study by Nelson and Cantrell; unfortunately, they presented no evidence of the reliability or

validity of the scale. Leming employed a measure of orthodox Christian beliefs with unknown reliability and validity. In summary, poor and limited measures of religiosity characterized previous studies that found a curvilinear component to the relation between religiosity and death anxiety.

The current study explored the curvilinear relation with better measures and a broader measure of religiosity, and investigated the relationship among age, gender, religiosity, and death anxiety, with particular emphasis on intrinsic religious motivation. Individuals with intrinsic religious motivation seek to internalize their religious beliefs, make those beliefs a central aspect of their lives, and live out those beliefs, whether or not they have orthodox beliefs and attend church regularly (Clements, 1998). Investigators have frequently observed gender differences in death anxiety. Females have demonstrated more death anxiety than males in a number of studies (Abdel-Khalek, 1991; Abdel-Khalek & Omar, 1988; Aday, 1984–85; Davis, Bremer, Anderson, & Tramill, 1983; Ray & Najman, 1974; Schumaker, Barraclough, & Vagg, 2001; Suhail & Akram, 2002; Tang, Wu, & Yan, 2002; Templer, Lester, & Ruff, 1974). At least three studies found no significant gender difference (Abdel-Khalek, 2002; Cole, 1978–1979; Fortner & Neimeyer, 1999); however, Cole found an interaction of single people and gender with single males, in which single males ($n = 10$) experience more death anxiety than single females do ($n = 14$).

This research addresses shortcomings of previous studies in this area using the Intrinsic Religious Motivation Scale (IRMS) (Hoge, 1972) and the Revised Death Anxiety Scale (RDAS) (Thorson & Powell, 1994), both of which are more sophisticated than the measures used in many previous studies on death anxiety. The most important reason for conducting this study was to compare results with previous studies that led to contradictory conclusions about the relationship between religiosity and death anxiety. The current study also helps fill the gap in results regarding gender that lead to different conclusions. Specifically, this study intends to answer the following research questions: Is there a relationship between religiosity, as measured by intrinsic religious motivation, and death anxiety? Is there a relationship between religiosity, as measured by frequency of attendance at religious services, and death anxiety? Is there any age difference in the level of death anxiety and religiosity? Do males and females differ in their levels of death anxiety and religiosity?

METHODS

Sample

The participants were 165 churchgoers from three churches (one catholic and two protestant churches) in Greeley, Colorado. The participants included males ($n = 72$, 43.60%) and females ($n = 93$, 56.40%) with a mean age of 48.05 ($SD = 17.46$). The age range was from 18 to 88. Most participants were married ($n = 113$, 68.50%); 30 (18.20%) participants were single; three participants (1.80%) were separated; 10 participants (6.10%) were divorced; four (2.40%) participants were remarried; and five (3.00%) participants were widows. Religious affiliations were as follows: Catholic, 4.80% ($n = 8$), Protestant, 87.30% ($n = 144$); and other, 7.90% ($n = 13$). The strength of religious beliefs was as follows: very strong, 93.90% ($n = 155$) and somewhat strong, 6.10% ($n = 10$). The frequency of attendance at religious services or meetings was several times a week, 60.60% ($n = 100$); once a week, 33.90% ($n = 56$); and less than once a week, 5.50% ($n = 9$).

INSTRUMENTATION

The participants filled out two scales, the *Intrinsic Religious Motivation Scale* (IRMS) and the *Revised Death Anxiety Scale* (RDAS), and a demographic questionnaire. All instruments were voluntarily administered at the same time in Bible group settings or individually in churches. The IRMS consists of ten statements measuring various religious orientations. A higher score shows a more extrinsic religious orientation. Scale reliability was found to be .90 (KR-20) and highly related to the ratings of intrinsic religious motivation (Hoge, 1972). The RDAS consists of 25 statements concerning different elements of fear of death. High scores on the RDAS show high death anxiety (Thorson & Powell, 1994). The scale exhibits acceptable reliability and validity (Tang et al., 2002; Thorson & Powell, 1998).

The demographic section of the questionnaire was designed for this particular study. This section of the questionnaire consisted of demographic questions about factors such as gender, age, marital status, and religious affiliation. Two questions targeted religiosity. Question 1 asked, "How strong is your religious belief?" with possible answers of (1) Very, (2) Somewhat, (3) Not very, (4) Not at all, and (5) I do not believe. Answers were scored 1, 2, 3, 4, and 5, respectively. A low score showed high religious belief. Question 2 asked, "How often do you attend religious services or meetings?" with possible answers of (1) Several times a week, (2) Once a week, and (3) Less than once a week. Answers were scored 1, 2, and 3, respectively. A low score showed frequent attendance at services.

RESULTS

Measurement Issues

The researcher conducted a principal axis factor analysis on both the IRMS and the RDAS. A preliminary analysis of initial communalities on the IRMS found that item four (<.10) should be deleted before factor analysis. The Kaiser-Meyer-Olkin (KMO) statistics value of the IRMS was .77. The chi-square in Bartlett's test of sphericity on the IRMS was 274.280 ($df = 36$, $sig = .000$); the KMO of the RDAS was .83, the chi-square in Bartlett's test of sphericity on the RDAS was 1,227.782 ($df = 300$, $sig = .000$). The significant chi-square in Bartlett's test of sphericity indicated that both scales were suitable for factor analysis since the correlation matrix was unlikely to be the identity matrix (Cerney & Kaiser, 1977). Parallel analysis (Kaufman & Dunlap, 2000) determined the number of factors to extract. Promax rotation was used with the degree of obliqueness determined by a hyperplane count (Gorsuch, 1983).

The investigation extracted two factors from the IRMS. The first three eigenvalues were 3.04, 1.19, and .96, while the first three eigenvalues from the parallel analysis were 1.25, 1.14, and 1.06. This indicates that two factors account for more variance than a corresponding analysis of random numbers. In determining the obliqueness of the rotation, the hyperplane count found that a kappa of five yielded the best approximation to a simple structure. Accordingly, there was a moderate correlation between the two factors (Factor 1 with Factor 2 = .61). Such correlations suggest the presence of a second-order factor on which the two first order factor load. The total score used in previous studies approximates this second order factor. The first factor, extrinsic religious motivation, consists of three items (9, 8, and 10), the second factor, intrinsic religious motivation, consists of five items (7, 1, 6, 3, and 5). The internal consistency reliability and Cronbach's alpha were .73 and .65, respectively. The reliability or internal consistency for 8-items of the IRMS was .74, which is lower than the reliability reported by Hoge (1972).

The investigation found two factors from the RDAS. Three initial eigenvalues (6.31, 2.13, and 1.65) were greater than the values of the parallel analysis, 1.65, 1.54, and 1.46. However, the third factor was less than three items. In determining the obliqueness of the rotation, the hyperplane count found that a kappa of three yielded the best approximation to a simple structure. Accordingly, there was a correlation between the two factors (Factor 1 with Factor 2 = .30). Such a correlation suggests the presence of a second-order factor on which the three first order factors load. The total score used in previous studies approximates this second order factor. The first factor, fear of death, consists of 16 items (7, 18, 2, 12, 22, 9, 20, 14, 6, 4, 19, 3, 25, 5, 11, and 16), and the second factor, fear of dying, consists of four items (15, 10, 1, and 23). The internal consistency reliability and Cronbach's alpha were .86 and .65, respectively. The internal consistency reliability, determined by Cronbach's alpha, was .84 on the 20-items of the RDAS.

Correlates of Religiosity Measures

The three measures of religiosity were highly related. A positive relationship existed between the IRMS and frequency of attendance, and a positive relationship existed between the IRMS and strength of belief. A positive relationship also existed between frequency of attendance and strength of belief. This pattern supports the validity of IRMS.

Gender, Age, and Death Anxiety

Gender showed no correlations, suggesting no difference between female participants and male participants on the IRMS and the RDAS. A negative relationship existed between age and IRMS Factor 2, intrinsic religious motivation, indicating that older participants possessed more intrinsic religious motivation.

Religiosity and Death Anxiety

A positive relation existed between religiosity and death anxiety. The IRMS and frequency of attendance significantly related to the RDAS and RDAS Factor 1, fear of death, indicates that participants with high scores on the IRMS reported significantly higher levels of death anxiety than that reported by participants with low IRMS scores. This study examined both the linear and quadratic terms with a multiple regression, using the Curve Estimation procedure in SPSS. For examining the existence of linear and quadratic relation between the IRMS and death anxiety, this investigation used only the RDAS total and RDAS Factor 1, fear of death, since they best represent the construct of general death anxiety. For examining the existence of linear and quadratic relation between the frequency of attendance and death anxiety, the investigation used the RDAS total and RDAS Factor 1, fear of death, since they best represent the construct of general death anxiety (see Figure 1 and 2).

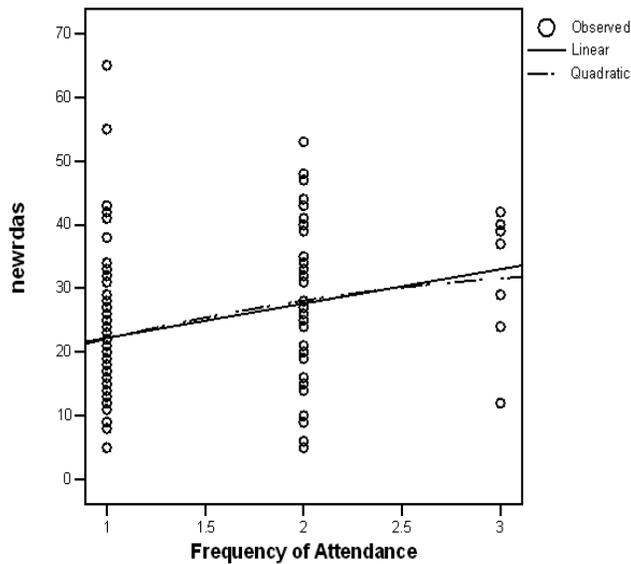


Figure 1: Linear and Quadratic Regression of the Frequency of Attendance on the Revised Death Anxiety Scale (RDAS)

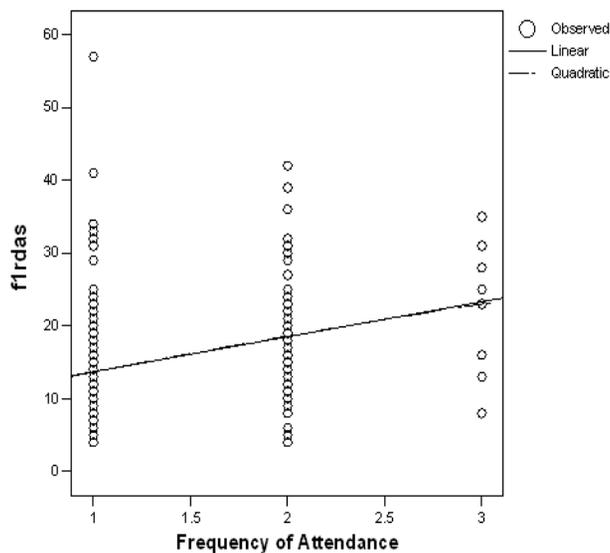


Figure 2: Linear and Quadratic Regression of the Frequency of Attendance on the Revised Death Anxiety Scale (RDAS) Factor 1

DISCUSSIONS

The analysis suggests the presence of both a linear and quadratic trend. Low levels of religiosity show a higher death anxiety. However, highly religious individuals show a lower death anxiety. This result differs from Templer and Dotson (1970), who found that religious variables do not relate to death anxiety. This result is similar to results obtained by Clements (1998), who reported that persons with intrinsic

religious motivation show significantly lower levels of various types of death anxiety than those with extrinsic religious motivation do. The result of the current study is similar to those of researchers who argued that religiosity correlated with low fear of death (Clements; Kraft et al., 2001; Martin & Wrightsman, 1965; Minear & Brush, 1980–1981; Richardson et al., 1983; Suhail & Akram, 2002; Templer, 1972). We do not know whether religious persons owe the good life philosophy as a kind of consoling factor or not, so we recommend a further qualitative study.

A positive relationship exists between intrinsic religious motivation, frequency of attendance at religious services or meetings, and strength of belief. The present study found a positive relationship between the frequency of attendance and strength of belief. The researcher found a positive relationship between frequency of attendance and death anxiety. This study indicated that the more frequently a person attends religious services or meetings, the less the person's death anxiety is. This result is similar to Adays' (1984–1985) and Duff and Hong's (1995) statement that those who attended church more often had lower death anxiety. The findings support Durkheim's (1915) notion regarding the importance of participation in shared religious rituals. Perhaps religious rites strengthen people and keep them from negative thinking.

The present study found a linear quadratic relationship between IRMS and death anxiety. A strong belief system may foster a perception of increased control and predictability, which may lessen the fear of death. Gender showed no effect on religiosity and total death anxiety. This result differs from those obtained in previous research, indicating females attained higher mean death anxiety scores than males did (Abdel-Khalek, & Omar 1988; Abdel-Khalek, 1991; Tang et al., 2002). The result of this study is similar to the report by Abdel-Khalek (2002), which detected no gender differences among college students. According to Abdel-Khalek (1991), bringing specific environmental events into a person's life can change their outlook on death anxiety. The participants in this study, in which the mean age was 49, were not young. A negative relationship existed between age and IRMS Factor 2, intrinsic religious motivation, ($r = -.19, p < .05$); older participants seemed to have lower extrinsic religious motivation than young participants did. Perhaps older participants hold more intrinsic religious motivation. Sometimes people with extrinsic religious motivation may have more death anxiety than those with intrinsic religious motivation do. Persons with more death anxiety may need counseling regarding this issue. If people need death education, churches or public media such as television, magazines, and websites can present religious issues.

The results of this study also show that the internal consistency reliability of the IRMS, determined by Cronbach's alpha, is .74. The internal consistency reliability of the RDAS, determined by Cronbach's alpha, is .84. This suggests that these instruments would be worth including in future studies of religiosity and attitudes toward death.

REFERENCES

- Abdel-Khalek, A. M. (1991). Death anxiety among Lebanese samples. *Psychological Reports, 68*, 924–926.
- Abdel-Khalek, A. M. (2002). Why do we fear death? The construction and validation of the reasons for death fear scale. *Death Studies, 26*, 669–680.
- Abdel-Khalek, A. M., & Lester, D. (2009). Religiosity and death anxiety: No association in Kuwait. *Psychological Reports, 104*(3), 770–772.
- Abdel-Khalek, A. M., & Omar, M. (1988). Death anxiety, state, and trait anxiety in Kuwaiti samples. *Psychological Reports, 63*, 715–718.
- Aday, R. H. (1984–1985). Belief in afterlife and death anxiety: Correlates and comparisons, *Omega, 15*, 67–75.

- Cerney, B., & Kaiser, H. F. (1977). A study of a measure of sampling adequacy for factor-analytic correlation matrices. *Multivariate Behavioral Research, 12*, 43–47.
- Clements, R. (1998). Intrinsic religious motivation and attitudes toward death among the elderly. *Current Psychology, 17*, 237–248.
- Cole, M. A. (1978–1979). Sex and Marital status differences in death anxiety. *Omega, 9*, 139–147.
- Davis, S. F., Bremer, S. A., Anderson, B. J., & Trammill, J. L. (1983). The interrelationships of ego strength self-esteem, death anxiety, and gender in undergraduate college students. *The Journal of General Psychology, 108*, 55–59.
- Donahue, M. J. (1985). Intrinsic and extrinsic religiousness: review and meta-analysis. *Journal of Personality and Social Psychology, 48*, 400–419.
- Duff, R. W., & Hong, L. K. (1995). Age density, religiosity and death anxiety in retirement communities. *Review of Religious Research, 37*, 19–32.
- Durkheim, E. (1915). *The elementary forms of the religious life, a study in religious sociology*. New York: Macmillan.
- Fortner, B. V., & Neimeyer, R. A. (1999). Death anxiety in older adults: A quantitative review. *Death Studies, 23*, 387–411.
- Gorsuch, R. L. (1983). *Factor analysis* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Hoge, D. R. (1972). A validated intrinsic religious motivation scale. *Journal for the Scientific Study of Religion, 11*, 369–376.
- Kaufman, J. D., & Dunlap, W. P. (2000). Determining the number of factors to retain: A Window-based FORTRAN-IMSL program for parallel analysis. *Behavior Research Methods, Instruments, & Computer, 32*, 389–395.
- Kraft, W. A., Litwin, W. J., & Barber, S. E. (2001). Religious orientation and assertiveness: Relationship to death anxiety. *The Journal of Social Psychology, 127*, 93–95.
- Leming, M. (1979–1980). Religion and death: A test of Homans' thesis. *Omega, Journal of Death & Dying, 10*, 347–361.
- Martin, D., & Wrightsman, L. S. Jr. (1965). The relationship between religious behavior and concern about death. *The Journal of Social Psychology, 65*, 317–323.
- McMordie, W. R. (1981). Religiosity and fear of death: Strength of belief system. *Psychological Reports, 49*, 921–922.
- Minear, J. D., & Brush, L. R. (1980–1981). The correlations of attitudes toward suicide with death anxiety, religiosity, and personal closeness to suicide. *Omega, 11*, 317–324.
- Nelson, L. D., & Cantrell, C. H. (1980). Religiosity and death anxiety: A multi-dimensional analysis. *Review of Religious Research, 21*, 148–157.
- Ray, J. J., & Najman, J. (1974). Death anxiety and death acceptance: A preliminary approach. *Omega, 5*, 311–315.
- Richardson, V., Berman, S., & Piwowarski, M. (1983). Projective assessment of the relationships between the salience of death, religion, and age among adults in America. *The Journal of General Psychology, 109*, 149–156.
- Schumaker, J. F., Barraclough, R. A., & Vagg, L. M. (2001). Death anxiety in Malaysian and Australian university students. *The Journal of Social Psychology, 128*, 41–47.
- Spilka, B., Minton, B., & Sizemore, D. (1977). Death and personal faith: A psychometric investigation. *Journal for the Scientific Study of Religion, 16*, 169–178.
- Suhail, K., & Akram, S. (2002). Correlates of death anxiety in Pakistan. *Death Studies, 26*, 39–50.
- Tang, C. S., Wu, A. M. S., & Yan, E. C. W. (2002). Psychosocial correlates of death anxiety among Chinese college students. *Death Studies, 26*, 491–499.
- Templer, D. I. (1972). Death anxiety in religiously very involved persons. *Psychological Reports, 31*, 361–362.
- Templer, D. I., & Dotson, E. (1970). Religious correlates of death anxiety. *Psychological Reports, 26*, 895–897.
- Thorson, J. A., & Powell, F. C. (1994). A revised Death Anxiety Scale. In R. A. Neimeyer (Ed.), *Death anxiety handbook* (pp. 31–43). Washington, DC: Taylor & Francis.
- Thorson, J. A., & Powell, F. C. (1998). African- and Euro- American samples differ little in scores on death anxiety. *Psychological Reports, 83*, 623–626.