MEANINGS OF DEATH AND INTRINSIC RELIGIOSITY

JAMES A. THORSON AND F. C. POWELL

University of Nebraska at Omaha

The objective of this study was to simplify understandings of relationships between multidimensional elements of the fear of death and dying with a unidimensional construct of intrinsic religiosity. A total of 346 individuals who ranged in age from 18 to 88 completed a death anxiety scale and a measure of intrinsic religious motivation. Respondents who were older and who were higher in intrinsic religiosity were significantly lower in death anxiety. Differing constructions of death and dying are examined.

"Know well, Socrates," Cephalus said, "that when a man faces the thought that he must die, he feels fear and anxiety about that which did not trouble him before."

--Plato's Republic, I 330d

Righting old wrongs, paying debts, and assessing one's past deeds are activities the old merchant Cephalus enumerated in his dialogue with Socrates as being brought on in later life by an increasing consciousness of impending death. And, while Marshall (1975) argues that old age and a realization of one's own finitude are not necessarily related, he does recognize the inevitability for most who are aging of the developmental phenomenon described by Butler (1963) as the life review. Much like the process described by Cephalus, the life review is brought on by a realization of impending death and involves a coming to terms with life, an opportunity to accomplish things before it is too late, and a chance to reconcile one's past conflicts with others. We have suggested (Thorson, 1983) that the life review also may be seen as an opportunity to come to terms with one's Creator. And, we also have argued (Thorson & Powell, 1988) that the markedly reduced levels of death anxiety found among aged samples are evidence in support of Butler's theoretical position on the life review process: a reconciliation with life—and death—that results in reduced anxiety even with the realization that death approaches.

What part, though, does religion play in this existential reconciliation? Does a stronger sense of religious conviction attenuate one's manifest fear of the end of life? Does a realization of the nearness of death refocus an individual's thoughts on greater realities, even upon the Infinite?

These are questions that were raised by G. Stanley Hall in his extended essay "Thanatophobia and Immortality" (1915). In fact, the recognition by some of the recent blossoming of research in the field of death and dying tends to obscure the fact that the quest for knowledge in this area had an important part in the emergence of the infant field of psychology from its parent, philosophy. Some of the earliest survey research in psychology (Hall, 1896; Scott, 1896) had to do with the investigation of death fears and how they might be ameliorated by religion. Scott, for example, found little death anxiety among the aged and said they looked forward to a new life free from earthly trials. The promise of religion, Hall stated, was the great answer to mankind's most compelling fear: "Thus never was the greatest Verdrängung that ever oppressed the human race so completely removed . . . by this most masterly of all psychotherapies" (1915, p. 561).

Requests for reprints should be addressed to Dr. James A. Thorson, Department of Gerontology, University of Nebraska at Omaha, Omaha, NE 68182.

379
Numerous subsequent papers have reviewed varying approaches that have been used for the assessment of death concern (Durlak & Kass, 1981; Kurlychek, 1979; Lonetto & Templar, 1986; Marshall, 1982; Pollak, 1980; Thorson & Powell, 1988). The literature on death and dying has grown so rapidly, in fact, that it might now be possible to prepare a review of the review articles. Generally, death fear has been found to be fairly well repressed (Becker, 1973; Marshall, 1975), but typically is higher in females and lower among the aged. There is some evidence upon which to conclude that it is developmental and declines with advancing age (Keller, Sherry, & Piotrowski, 1984), perhaps because of the life review process (Thorson & Powell, 1988).

In addition, various elements of religion have been shown to increase or at least remain stable in later life (Blazer & Palmore, 1976; Gray & Moberg, 1977; Hunsberger, 1985; Koenig, George, & Siegler, 1988; Koenig, Kvale, & Ferrel, 1988; Watson, Howard, Hood, & Morris, 1988), a process that also may be developmental. It has been suggested that religious understanding and a belief in an afterlife moderate fear of death, particularly as one ages (Hall, 1915), and that a majority of the population state a belief in life after death. Klenow and Bolin’s (1989) analysis of national data indicates that 69.8% of the U.S. adult population believe in an afterlife and that those with a self-described “strong religious intensity” (80.7%) were most likely to have such a belief.

Recent research has sought to confirm Hall’s contention. Religion has been seen as a factor that influences death fears. In a survey of 23 research investigations into the relationship between religiosity and death fear, Leming (1980) enumerated 10 that found that religious factors related to the reduction of the fear of death, 7 that found no significant relationships, 3 that demonstrated curvilinear relationships, and 3 that found a significant positive correlation between death fear and elements of religiosity.

In a study of death anxiety, strength of religious values, belief in an afterlife, and suicide acceptance, Minear and Brush (1981) found little relationship between death anxiety and the elements of religiosity, but a strong negative correlation \( r = -.45, \ p < .001 \) between belief in an afterlife and suicide acceptance. Stark, Doyle, and Rushing (1983) found a significant negative correlation \( r = -.37 \) between church membership and suicide rate. However, Nehre, Bellucci, and Gabriel (1978) found little evidence to support Erikson’s contention that people in later life seek to resolve a conflict between ego integrity and despair. Bengtson, Cuellar, and Ragan (1977), though, suggested that lower levels of death anxiety among the aged are indicative of a resolution of a crisis of finitude.

Two studies (Templer, 1972; Templar & Dotson, 1970) used the Death Anxiety Scale (DAS) that was developed by Templar in 1970 along with a series of eight questions that concern denomination, frequency of church attendance, and self-rated depth of belief. The first was with a sample of 213 college students and demonstrated no significant relationships or differences. The eight religious items, however, did not make up an actual scale that could be said to measure a particular construct, even though it was labeled a “religious inventory.” The 1972 study involved administration of the same instruments to participants in church retreats; the 267 respondents were presumably highly religious. Within this sample, those with more frequent church attendance and greater self-described depth of belief did have significantly lower DAS scores. In a later review of these and other studies of death anxiety and religion, Lonetto and Templar recognized the methodological difficulties present in most such research, but concluded: “Nevertheless, it probably can be said that the most useful generalization is that religious people tend to have low anxiety” (1986, p. 18).

Kahoe and Dunn (1975) have reported a negative relationship between intrinsic religion and death fear, but no relationship between death anxiety and extrinsic religiosity. Bolt (1977), on the other hand, reported a positive relationship between fear of death and extrinsic religion, but no significant correlation with intrinsic religion. In a 1977 article, Spilka, Minton, Sizemore, and Stout treated both religiosity and death anxiety
multidimensionally and reported all of the above. Testing for religious factors and eight constructs of the fear of death, Spilka et al. found equivocal results despite their claim that, "The foregoing rather clearly provides support for the hypotheses advanced relating form of personal religiosity and death perspectives" (1977, p. 176).

Hoelter (1979) presented some low-level correlations with religious orthodoxy as evidence for the construct validity of his multidimensional fear of death scale. Nelson and Cantrell (1980) used measures of fear of death and religious practices and beliefs; they claimed to have found a curvilinear relationship and that religious practice was a better predictor of lower death anxiety than was religious belief. Their sample, however, was limited only to males and excluded non-Christians. Hoelter and Epley (1979) used multidimensional measures for both religion and fear of death with a student sample and found a substantial negative correlation ($r = - .64$) between religious orthodoxy and the dimension of death anxiety that they identified as fear of the unknown. It was clear from their data that belief factors had a more substantial relationship to death fear than did religious practices. Interestingly, two death fear scales they describe as unidimensional, Templer's DAS (1970) and Boyar's Fear of Death Scale (1964), had no correlation whatsoever with any of the elements of religious practice or belief. Gay (1985) did find significant relationships between the scores on Templer's DAS and a multidimensional measure of religiosity, Faulkner and DeJong's Religiosity in 5-D scale (1966).

One way to assess personal constructs of the meaning of death is by use of the various forms of the Threat Index and the Death Attitude Repertory Test, both adaptations of a repertory grid technique (Neimeyer & Moore, 1989). Tobacyk (1984) found a significant negative correlation ($r = -.23$) between Threat Index scores and a measure of traditional religious belief in a sample of 78 psychology students.

With a fairly large ($N = 371$) and diverse sample, Feifel and Branscomb (1973) found age and religious self-rating to be the only predictor variables to be associated consistently with a personal fear of death.

It has been observed (Downey, 1984; Thorson & Powell, 1989) that many different relationships between fear of death and religiosity have been reported in the literature, sometimes by the same authors. (Cf. Feifel, 1974; Feifel & Branscomb, 1973; Powell & Thorson, in press; Templer, 1972; Templer & Dotson, 1970; Thorson & Powell, 1989.) Part of this lack of consistent findings no doubt has to do with both conceptual complexity and differing methodologies, but it also may have to do with characteristics of varying research samples. Studies of homogeneous samples, as might be suspected, seemingly have shown less variance than studies of heterogeneous samples. Templer and Dotson's (1970) original work with a college student sample is an example of this, as is Downey's (1984) study of male middle-aged professionals. We have reported a nonsignificant correlation ($r = -.11$) between death anxiety and intrinsic religious motivation among a sample of 103 older males; we may have run into a problem of data compaction in a homogeneous sample (Thorson & Powell, 1989). In larger samples with a greater age spread, we have found significant negative relationships between death anxiety and a belief in an afterlife (Powell & Thorson, in press; Thorson & Powell, 1988).

Conceptual differences also have been a problem. As Wittkowski has observed, "It seems likely that in those studies which have yielded contradictory results, both different aspects of religiosity and different components of the fear of death and dying have been tapped" (1988, p. 308). Another part of the methodological problem in some of the research has been a denominational identification of instruments to measure religiosity that are primarily Christian (Leming, 1980; Wittkowski, 1988; Young & Daniels, 1981) or Jewish (Florian & Kravetz, 1983).

Feifel (1974) has noted that the use of differing definitions and unidimensional measures to assess both fear of death and religiousness has contributed to the ambiguity of findings. We might add that small sample size often has led to findings that are less
than conclusive. It might, in fact, be testimony to the strength and theoretical appeal of the concept that researchers continue to demonstrate occasional strong relationships in studies that used nonstandard instruments and small, homogeneous samples. (Cf. Alexander & Alderstein, 1959, 1960; Kahoe & Dunn, 1975; O'Dowd, 1984.)

However, as Leming (1980) has said, "Death is not only the greatest source of anxiety for man, it is the primary crisis event which calls forth religious behavior" (p. 348). It seems evident, then, that a study of relationships of religiosity with death anxiety might yield useful findings if it could be done with carefully defined concepts, valid, reliable instruments, and a large, heterogeneous population. This was our goal for the present study, and we hypothesized that both age and religiosity would have significant negative relationships with elements of death anxiety. Further, we posited that factor analysis and a careful item analysis might cast some light both on how people high (and low) in death anxiety construe religion and, equally, how those high (and low) in religiosity might view death. Because of the particular problem of the multiple and often confusing relationships created when testing within two domains that are by their nature multidimensional, we sought in addition to simplify the study conceptually. It seemed that isolating the construct of depth of belief would get to the heart of religiosity, and by thus focusing we would avoid extraneous variables such as denomination affiliation, religious activities and behaviors, or extrinsic factors such as socialization goals. A unidimensional measure of strength of personal religiosity, then, might be correlated with elements of death anxiety without making for needless complexity.

**Method**

We previously had extracted six items that relate to religious practices and beliefs from a study of death anxiety and lethal behaviors among a group of 389 adults (Thorson & Powell, in press). Correlations of the individual items with a death anxiety scale were highest for those that dealt with afterlife concerns (Powell & Thorson, in press). Taken as a whole, however, the six items made up an inadequate scale that mixed several belief items with practice items ("Do you go to church regularly?") and did not hang together conceptually. Thus, we sought a unidimensional scale that dealt only with depth of belief and one that could be used appropriately with nonreligious as well as religious respondents and equally well with different faith traditions (Jews, Christians, Muslims, etc.). A scale by Hoge (1972) was identified and used in a smaller study preliminary to the present one, and it proved to be entirely adequate and convenient to administer (Thorson & Powell, 1989).

**Instruments**

Hoge's (1972) Intrinsic Religious Motivation Scale (IRM) is a 10-item instrument that contains statements (e.g., "My faith involves all of life.") that deal with depth of belief rather than frequency of religious behaviors or activities, extrinsic motivations such as socialization, or denominational preference. It is appropriate for different cultural and religious traditions. In a factor analysis we found the items to load on one general factor, which indicated its unidimensionality. In the present instance, we scored Hoge's scale using a five-point Likert response format from 0 (lowest) to 4 (highest) for each item in terms of strength of response. Seven of the statements are positive, and three use negative phrasing; scoring for these three is reversed. There is a possible range on the IRM of from zero (lowest in intrinsic religious motivation) to 40 (highest).

In the development and validation of the IRM, Hoge sought to address the methodological tangle that had emerged with various scales for the assessment of religion (see the review chapter by Payne, 1982), mainly with scales that mixed multiple dimensions of religiosity haphazardly and lacked rigorously developed conceptual frameworks. Hoge's intention was to isolate one single theoretical dimension mentioned by Allport (1950, 1967) and to construct a unidimensional scale of intrinsic religiosity.
Allport's original conceptualization was that intrinsic and extrinsic religion might be seen as bipolar ends of the same continuum. His thinking evolved over time, according to Donahue (1985), and he came to see them as separate constructs. Intrinsic religion would be defined as, "a meaning-endowing framework in terms of which all of life is understood" (Donahue, 1985, p. 400), whereas extrinsic religiousness is a more instrumental approach of comfort and social convention. Donahue, in an extensive review of the conceptual differences, points out that intrinsic religiousness correlates positively with other measures of religiosity and that, "Intrinsic religiousness serves as an excellent measure of religious commitment, as distinct from religious belief, church membership, liberal-conservative theological orientation, and related measures" (1985, p. 415). Additionally, Donahue suggested that further research might show a negative correlation between fear of death and intrinsic religiousness.

In the development of the IRM scale, Hoge constructed 30 items congruent with Allport's theoretical approach, submitted them to a panel of respondents who had been suggested by judges to be high in personal traits of either intrinsic or extrinsic religiousness, and factor analyzed the resultant data to select the 10 items most characteristic of intrinsic motivation. In a validation study, Hoge found correlations of .871 and .874 between these 10 items and the intrinsic portions of Feagin's Intrinsic-Extrinsic Scale (1964) and Allport and Ross's Intrinsic-Extrinsic Scale (1967), respectively. The Kuder-Richardson measure of reliability reported by Hoge was .901.

One note on our use of the Hoge scale: In the present study, we simplified the wording of the last two items, which originally had read, "Although I am a religious person, I refuse to let religious considerations influence my everyday affairs," and, "Although I believe in my religion, I feel there are many more important things in life." These were double-barreled in the sense that one could agree with part of the statement and disagree with the other part. This caveat notwithstanding, Hoge's Intrinsic Religious Motivation scale is one of the few measures of religiousness that is intentionally unidimensional and has been shown to be discreet, is convenient to administer, and has adequate measures of reliability and validity. Unlike other unidimensional scales, it is without reference to one particular belief system. (Cf. Fullerton & Hunsberger, 1982.) The IRM has been used successfully in a number of previous studies (Kivett, 1979; Koenig, Kvale, & Ferrel, 1988; Thorson & Powell, 1989).

The measure of death anxiety (DA) was one previously used in a number of studies of adult populations; it is a modification of a scale that Nehrke (1973) had derived from Templar's (1970) and Boyar's (1964) earlier work. The factor structure of this multidimensional scale has been reported previously (Marshall, 1982; Thorson & Powell, 1988). It contains 25 statements, with 17 phrased positively and 8 negatively to minimize response-set bias; the negatives are reversed in scoring. In previous research we had used a true-false format for the DA scale to make it simpler for older respondents. However, in the small study that was done as a preliminary to the present research (Thorson & Powell, 1989), older participants proved to have no problem responding on a five-point Likert format. This was used in the present study; each item was scored from 0 (least anxiety) to 4 (highest), which gave a possible range of from 0 to 100.

Subjects

Participants in this study were 26 members of an AARP chapter, 103 members of a civic organization, 55 participants in a continuing education program, and 162 undergraduate and graduate students; 167 of our respondents were male and 178 female; only 8 were members of racial minorities. Members of the overall sample were better educated than the adult population generally; 32.6% were college graduates. They ranged from 18 to 88, with a mean of 43.6 years (SD = 23.4) and a median of 36. Respondents' ages tended to be skewed more toward the extremes of a continuum than the adult population as a whole: The youngest quartile was under 21 and the oldest quartile was
above 67. Participation was voluntary, results were collected anonymously, and an informed consent statement on each questionnaire asked those unwilling to participate simply to turn in a blank response. These instruments have been used in previous studies, but any risks to participants have not been assessed.

RESULTS

Scores for the sample as a whole were $M = 25.87$ ($SD = 8.44$) on the Hoge Intrinsic Religious Motivation Scale (with a range of from 1 to 40), and a mean score of 45.15 ($SD = 16.34$) on the DA scale, with individual scores that ranged from 7 to 93. Cronbach alphas of reliability were .85 for the IRM and .83 for the DA. The IRM associated positively ($r = .27, p < .001$) and the DA negatively ($r = -.27, p < .001$) with age among the members of the sample taken as a whole.

Table 1

<table>
<thead>
<tr>
<th>Age group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>72</td>
<td>51.85</td>
<td>15.93</td>
<td></td>
</tr>
<tr>
<td>21-36</td>
<td>93</td>
<td>48.43</td>
<td>17.83</td>
<td></td>
</tr>
<tr>
<td>37-67</td>
<td>74</td>
<td>39.79</td>
<td>14.57</td>
<td></td>
</tr>
<tr>
<td>68-88</td>
<td>86</td>
<td>41.22</td>
<td>14.78</td>
<td></td>
</tr>
<tr>
<td>Intrinsic religious motivation</td>
<td></td>
<td></td>
<td></td>
<td>10.08, $p &lt; .0001$</td>
</tr>
<tr>
<td>18-20</td>
<td>72</td>
<td>22.26</td>
<td>7.31</td>
<td></td>
</tr>
<tr>
<td>21-36</td>
<td>93</td>
<td>23.42</td>
<td>9.65</td>
<td></td>
</tr>
<tr>
<td>37-67</td>
<td>74</td>
<td>29.21</td>
<td>7.53</td>
<td></td>
</tr>
<tr>
<td>68-88</td>
<td>86</td>
<td>27.61</td>
<td>7.16</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen from the data in Table 1, the correlational data were confirmed by analysis of variance. Older respondents had significantly lower mean scores on the DA and significantly higher mean scores on the IRM. Duncan multiple-range procedures confirm that in both cases the two youngest quartiles differ significantly from the two oldest. There was no difference in IRM by sex ($r = -.05, ns$) and only a slight male-female difference in DA ($r = .10, p < .05$), one that did not hold up when tested by ANOVA. This is consistent with previous findings. Constructions of the meaning of death and dying did differ somewhat by sex; women had significantly higher means on seven of the DA items, principally those that deal with pain and decomposition. (Cf. Thorson & Powell, 1988.)

We divided the sample into 40% who scored highest in death anxiety (DA $M \geq 49, n = 141$) and the 40% with the lowest DA scores ($M \leq 39, n = 136$) and compared these two groups' IRM scores. (See Table 2.) The higher DA group had a higher proportion of women (62% vs. 45% female in the low-DA group) and was younger than those who were low in death anxiety ($M = 36.4$ years vs. $M = 49.7$ years in the low-DA group). Means for the IRM were significantly lower for those high in death anxiety, as is reported in Table 2; 7 of 10 IRM item means were significantly lower among these
Table 2
Intrinsic Religious Motivation Scale Item Means and Standard Deviations for Those Highest and Lowest in Death Anxiety

<table>
<thead>
<tr>
<th>Intrinsic Religion Scale item</th>
<th>Highest in D.A. (M ≥ 49, N = 141)</th>
<th>Lowest in D.A. (M ≤ 39, N = 136)</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My faith involves all of life.</td>
<td>2.87 (SD = 1.01)</td>
<td>3.26 (SD = 1.04)</td>
<td>3.17***</td>
</tr>
<tr>
<td>2. In my life I experience the presence of the Divine.</td>
<td>2.48 (SD = 1.01)</td>
<td>2.99 (SD = 1.18)</td>
<td>3.87***</td>
</tr>
<tr>
<td>3. One should seek God's guidance when making every important decision.</td>
<td>2.63 (SD = 1.06)</td>
<td>2.93 (SD = 1.27)</td>
<td>2.14*</td>
</tr>
<tr>
<td>4. My faith sometimes restricts my actions.</td>
<td>2.29 (SD = 1.19)</td>
<td>2.49 (SD = 1.36)</td>
<td>1.30</td>
</tr>
<tr>
<td>5. Nothing is as important to me as serving God as best as I know how.</td>
<td>2.32 (SD = 1.07)</td>
<td>2.79 (SD = 1.27)</td>
<td>3.91***</td>
</tr>
<tr>
<td>6. I try hard to carry my religion over into all my other dealings in life.</td>
<td>2.29 (SD = 1.10)</td>
<td>2.89 (SD = 1.33)</td>
<td>4.09***</td>
</tr>
<tr>
<td>7. My religious beliefs are what really lie behind my whole approach to life</td>
<td>2.09 (SD = 1.09)</td>
<td>2.74 (SD = 1.25)</td>
<td>4.61***</td>
</tr>
<tr>
<td>8. It doesn't matter so much what I believe as long as I lead a moral life.</td>
<td>1.87 (SD = 1.21)</td>
<td>2.18 (SD = 1.55)</td>
<td>1.34</td>
</tr>
<tr>
<td>9. I refuse to let religious considerations influence my everyday affairs.</td>
<td>2.43 (SD = 1.10)</td>
<td>2.68 (SD = 1.31)</td>
<td>1.75</td>
</tr>
<tr>
<td>10. I feel there are many more important things in life than religion.</td>
<td>2.48 (SD = 1.18)</td>
<td>2.85 (SD = 1.31)</td>
<td>1.98*</td>
</tr>
<tr>
<td>Total Intrinsic Religious Motivation Scale Score</td>
<td>23.75 (SD = 7.50)</td>
<td>27.79 (SD = 9.65)</td>
<td>3.89***</td>
</tr>
</tbody>
</table>

*p < .05. **p < .02. ***P < .01.

High-DA respondents. An examination of the item differences gives an idea of conceptual differences between the groups. Interestingly, the high death concern group's correlation between IRM and DA was not significant (r = -.08), but the Pearson correlation of IRM and DA scales was a robust r = -.31 (p < .001) for those lowest in death anxiety.

A similar procedure was used to separate the 40% who were highest in intrinsic religious motivation (IRM mean equal to or higher than 29, n = 145) and the 40% lowest (M ≤ 24, n = 137). The high-religiosity group was much lower in fear of death, as can be seen in Table 3, which also indicates that 18 of the 25 DA scale items were significantly different as well. (Note that, as in Table 2, the scoring for the negatively phrased items has been reversed.) High IRM respondents have lower item means in 17 of the 18 instances in which there is a significant difference. And, for this group the IRM correlation with DA is -.36 (p < .001); as religiosity score increases, death anxiety mean scores goes down. The high-IRM group was divided equally between men and women; 55% of the low-IRM group were female. The members of the high-IRM group were a good deal older (50.1 years vs. 35.4 years) than the 40% who were lower in intrinsic religious motivation.

A separate factor analysis of the death anxiety items was done for each of the four groups: those highest and lowest in intrinsic religious motivation and those who scored highest and lowest on the death anxiety scale. Theoretically, the manner in which the various factors cluster should give some insight into the different ways the respective
groups construe death and dying. In each instance, a principal components extraction was done, and then data were rotated by the Varimax procedure with a Kaiser normalization. A four-factor solution for each group identified factors each of which had an eigenvalue greater than 1.0.

Table 3
*Death Anxiety Items Means and Standard Deviations for Those Highest and Lowest in Intrinsic Religious Motivation*

<table>
<thead>
<tr>
<th>Death Anxiety Scale item</th>
<th>Highest (M \geq 29, N = 145)</th>
<th>Lowest (M \geq 24, N = 137)</th>
<th>(t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. I fear dying a painful death.</td>
<td>2.17 1.37</td>
<td>2.60 1.28</td>
<td>2.71***</td>
</tr>
<tr>
<td>12. Not knowing what the next world is like troubles me.</td>
<td>1.31 1.28</td>
<td>1.78 1.17</td>
<td>3.21***</td>
</tr>
<tr>
<td>13. The idea of never thinking again after I die frightens me.</td>
<td>1.16 1.33</td>
<td>1.86 1.31</td>
<td>4.44***</td>
</tr>
<tr>
<td>14. I am not at all anxious about what happens to the body after burial.</td>
<td>1.68 1.51</td>
<td>1.79 1.29</td>
<td>.65</td>
</tr>
<tr>
<td>15. Coffins make me anxious.</td>
<td>1.26 1.35</td>
<td>1.42 1.17</td>
<td>1.06</td>
</tr>
<tr>
<td>16. I hate to think about losing control over my affairs after I am gone.</td>
<td>1.10 1.26</td>
<td>1.65 1.20</td>
<td>3.74***</td>
</tr>
<tr>
<td>17. Being totally immobile after death bothers me.</td>
<td>.86 .19</td>
<td>1.50 1.26</td>
<td>4.38***</td>
</tr>
<tr>
<td>18. I dread to think about having an operation.</td>
<td>1.88 1.27</td>
<td>1.88 1.19</td>
<td>–</td>
</tr>
<tr>
<td>19. The subject of life after death troubles me greatly.</td>
<td>.90 .11</td>
<td>1.49 1.04</td>
<td>4.59***</td>
</tr>
<tr>
<td>20. I am not afraid of a long, slow dying.</td>
<td>2.68 1.30</td>
<td>2.79 1.19</td>
<td>.74</td>
</tr>
<tr>
<td>21. I do not mind the idea of being shut into a coffin when I die.</td>
<td>1.59 1.46</td>
<td>1.97 1.23</td>
<td>2.39**</td>
</tr>
<tr>
<td>22. I hate the idea that I will be helpless after I die.</td>
<td>1.13 1.27</td>
<td>1.71 1.20</td>
<td>3.94***</td>
</tr>
<tr>
<td>23. I am not at all concerned over whether or not there is an afterlife.</td>
<td>3.03 1.33</td>
<td>2.36 1.12</td>
<td>4.56***</td>
</tr>
<tr>
<td>24. Never feeling anything again after I die upsets me.</td>
<td>1.01 1.19</td>
<td>1.85 1.26</td>
<td>5.76***</td>
</tr>
<tr>
<td>25. The pain involved in dying frightens me.</td>
<td>1.86 1.33</td>
<td>2.48 1.16</td>
<td>4.16***</td>
</tr>
<tr>
<td>26. I am looking forward to a new life after I die.</td>
<td>.69 .97</td>
<td>1.75 1.12</td>
<td>8.51***</td>
</tr>
<tr>
<td>27. I am not worried about ever being helpless.</td>
<td>2.35 1.37</td>
<td>2.47 1.13</td>
<td>.80</td>
</tr>
<tr>
<td>28. I am troubled by the thought that my body will decompose in the grave.</td>
<td>1.09 1.23</td>
<td>1.38 1.11</td>
<td>2.07*</td>
</tr>
<tr>
<td>29. The feeling that I will be missing out on so much after I die disturbs me.</td>
<td>1.23 1.30</td>
<td>2.12 1.23</td>
<td>5.89***</td>
</tr>
<tr>
<td>30. I am worried about what happens to us after we die.</td>
<td>1.24 1.27</td>
<td>1.88 1.14</td>
<td>4.44***</td>
</tr>
</tbody>
</table>
Table 3 (continued)

<table>
<thead>
<tr>
<th>Death Anxiety Scale item</th>
<th>Highest (M ≥ 29, N = 145)</th>
<th>Lowest (M ≥ 24, N = 137)</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. I am not at all concerned with being in control of things.</td>
<td>2.05 SD 1.28</td>
<td>2.40 SD 1.07</td>
<td>2.48*</td>
</tr>
<tr>
<td>32. The total isolation of death is frightening to me.</td>
<td>1.17 SD 1.21</td>
<td>1.88 SD 1.18</td>
<td>4.98***</td>
</tr>
<tr>
<td>33. I am not particularly afraid of getting cancer.</td>
<td>2.35 SD 1.33</td>
<td>2.60 SD 1.22</td>
<td>1.64</td>
</tr>
<tr>
<td>34. I will leave careful instructions about how things should be done after I am gone.</td>
<td>2.17 SD 1.76</td>
<td>2.38 SD 1.13</td>
<td>1.18</td>
</tr>
<tr>
<td>35. What happens to my body after I die does not bother me.</td>
<td>1.37 SD 1.37</td>
<td>2.04 SD 1.28</td>
<td>4.24***</td>
</tr>
<tr>
<td>Total Death Anxiety Scale Score</td>
<td>39.24 SD 16.75</td>
<td>50.06 SD 15.41</td>
<td>5.64***</td>
</tr>
</tbody>
</table>

*p < .05. **p < .02. ***p < .01.

For those highest and lowest on Hoge’s IRM scale, factor matrices revealed a similar principal factor on the death anxiety items that accounted for about 32% of the variance. This general-death anxiety main factor clustered 13 (out of 25) items with loadings above .40 for the high-religion group and 14 DA items for the low-religion respondents; 12 of these items were the same for both groups. Similarly, the second factor that emerged, one relating to the fear of pain, had a degree of convergence for both; three of five items were identical. There was some variation among the items that clustered in the third and fourth factors for the two groups. For those who scored highest in intrinsic religious motivation, the third factor was made up of items that deal with a fear of helplessness as a part of the dying process, and the fourth with concepts related to what happens after death. Those who had the lower scores on Hoge’s scale had concerns with loss of bodily integrity and decomposition that emerged as a cluster on the third factor, with loss of control items included in the fourth. Interestingly, Item #26 (“I am looking forward to a new life after I die”) did not load on any of the four principal factors for the low-IRM group.

Dividing the sample by the 40% highest and lowest in death anxiety scale scores, Varimax four-factor solutions for the DA demonstrated, as might be expected, considerable variation. Of 12 items that clustered for their group into a first general factor, only 7 were congruent. There was no convergence at all among the items that made up each group’s second factor, which clustered pain and helplessness items for the high-death anxiety group and afterlife items for the low-death anxiety group. Concerns with what happens after death, particularly the fear of decomposition, made up a third factor for the high DA respondents; their fourth factor clustered several items that deal with fear of pain and loss of control over worldly events. The members of the sample who scored lowest in DA had concern for helplessness and a long, slow dying process cluster in their third factor, and two fear-of-pain items made up the fourth. Overall, the subjects higher in death anxiety seemed to demonstrate greater concerns for loss of “being,” for pain, and for decomposition, whereas the factor analytic data pointed to more of a concern over uncertainty with what happens after death among the lower-DA scorers. Thus, constructions of death differ greatly for those high and low in death anxiety, just as they differ among males and females and older and younger respondents.
Constructions of death and dying, however, did not differ markedly for those high and low in intrinsic religious motivation.

**Discussion**

The data support the hypotheses that both age and religiosity would associate negatively with death concerns. Older respondents scored significantly higher in intrinsic religious motivation and lower in death anxiety. Those higher in religiosity were lower in fear of death. The respondents who were highest in death anxiety were significantly lower in religiosity. And, the separate factor analyses (tabular data on the four factor matrices are available upon request to the senior author) indicated that people higher in intrinsic religiosity do not construe death and dying much differently from those who score lower on the IRM scale. The measure used excluded concepts of extrinsic, denominational, and behavioral elements of religiosity that might have clouded the issue.

Probing a bit further with item analysis reveals some interesting relationships. The dimensions of death and dying that most concern both the high- and low-religiosity groups are similar. The high-IRM group's five highest DA item means are (in order) on numbers 23, 20, 27, 34, and 11, and the low-IRM group's highest DA item means occur on numbers 20, 11, 33, 25, and 27. In other words, individuals in both subsamples rate fears of pain and helplessness—fears associated with the process of dying—among their greatest concerns. They differ with respect to item #23. The high-religiosity group is concerned that there is an afterlife; it is a matter of importance that cannot be dismissed. Unlike the low-religiosity group, however, they have a very low score on DA item #19; while they do have the concern, it does not trouble them greatly. This is because, as is seen in their response to item #26, they look for a new life after the present one. The low-religiosity group also is low on DA #19; they are not troubled greatly by the subject of life after death. However, their response to the new life item, DA #26, accounts for the largest difference among all of the DA item means.

Similarly, these two groups differ with constructions of a new life after death on those DA items upon which they have scored the lowest: #28, 15, 19, and 17 for the low-religiosity group, and #26, 17, 19, and 28 for the high-IRM subsample. That which concerns them least is not all that dissimilar. Not surprisingly, DA item #26 does not load on the factor analysis of the DA scale for those low in religiousness. It evidently is something of a foreign concept to a fairly large portion of the population; life after death does not play a part in their constructions of death and dying. In our 1988 study, 32.9% of the sample (n = 599) answered "false" to this particular item, which is consistent with the proportion of the population nationally that does not believe in an afterlife (Klenow & Bolin, 1989).

After differentiating the present sample and the previous one on the responses to an expectation of life after death item, though, the major concerns of both have to do with pain, helplessness, cancer, and a lingering death: all elements of the process of dying, rather than the prospect of being dead.

Briefly looking at the greatest concerns relative to death and dying of those identified as high and low in death anxiety paints a similar picture. The high-DA group was highest on numbers 20, 11, 33, 25, 23, and 27; the low-DA group had numbers 23, 20, 27, 33, and 34 as their highest DA item means. Both groups were concerned over an afterlife, but most of their primary fears had to do with pain, helplessness, and loss of control concepts. Decomposition was of little concern to either.

There are some practical implications to these data, especially for the counselor or chaplain engaged in a helping relationship in a clinical setting. By and large, people seem to fear dying more than they fear being dead. Religion is an important moderator of one element of the fear of death for those who are religious, and the practitioner who is not personally religious too often forgets this. However, the fear of the process
of dying—the discomfort and helplessness and the pain—remains; it remains for most people, religious or not. Probing for individual belief in an afterlife is something that should be seen as important and probably is too often overlooked in a secular society. The hope of a new life after death is a major source of comfort to a large part of the population, and this is particularly true for those nearest death, the aged. After that, though, the fear of a painful death seems to be almost universal. Reassurance (and advocacy) that the dying individual will be kept as comfortable as possible, as in-control as possible; and as pain-free as possible must be vital components of the helping process; hence the success of the hospice concept.

With persons who, either through the process of life reviewing or through personal death of faith, have come to terms with their own mortality, the discomfort of dying itself remains as a major concern. Solving one's existential problem is a great accomplishment. We suspect, however, that it is the result of life-long developmental processes. Of more immediate concern is providing support and relief while there still is life. The prospect of what happens beyond may be of less concern than the immediate threat of pain. It seems almost self-evident that one could ask the person who is approaching death what concerns him or her most. We should not be surprised if the source of the anxiety is not so much the thought of being dead, but the process of dying.

In conclusion, further cross-sectional evidence has been presented that death anxiety is lower and that intrinsic religious motivation is higher in later life. Whether these differences are due to developmental processes or cohort effects cannot be determined on the basis of the present data; sample characteristics are such that generalizing to the population as a whole must be done cautiously. The data, however, indicate that, at least for those high in intrinsic religiosity and those low in death anxiety, concepts of religion and death seem to be related. For those high in death anxiety, religiousness appears to be less important. Constructs of death and dying are not remarkably dissimilar for those higher and those lower in intrinsic religious motivation, with the exception of the belief in an afterlife. Elements of the dying process itself seem to represent greater sources of concern than does the thought of being dead. And, while both the life review process and intrinsic religious belief may attenuate anxieties related to elements of death, neither speaks to a pervasive fear of pain and helplessness. Further research is needed on how understandings of the life review interrelate with elements of religiosity. However, the immediate threat of dying for most people is the fear of discomfort.

REFERENCES


