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# CONCEPTS OF DEATH: ARE FEAR AND ANXIETY THE ONLY COMPONENTS?

A Thesis

Presented to

The Faculty of the Department of Psychology
The College of William and Mary in Virginia

In Partial Fulfillment of the Requirements for the Degree of

Master of Arts

by
Patricia Hunter Frazier
1986

## APPROVAL SHEET

This thesis is submitted in partial fulfillment of
the requirements for the degree of
Master of Arts

Patricia Hunter Frazier

Approved, May 1986

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## **DEDICATION**

For my parents whom I love deeply,

and for my friend, DFG, who showed me

the meaning of friendship.

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#### **ABSTRACT**

The purpose of the present study was to create a measurement instrument that would reveal the multidimensional nature of individuals' concepts of death. The Concepts of Death Questionnaire (CDQ) was administered to participants in conjunction with two measures of death anxiety (Templer's 1970 Death Anxiety Scale, and Collett and Lester's 1967 Fear of Death and Dying Scale), selected personality measures, a measure of generalized anxiety, a social desirability scale, and demographic questions. Personality variables measured were extraversion-introversion, neuroticism, inner direction, and time competence. The questionnaires were completed by 163 volunteers ranging in age from 15 to 86. Results of a principal-components factor analysis of the CDQ demonstrated that individuals' concepts of death are multidimensional, being composed of four factors identified as: Death as a personal reality, Orientation to immortality, Environment with regard to death, and Emotionality associated with An item analysis of the CDQ revealed that each item in a particular factor contributed appreciably to the measurement of that factor. Four stepwise multiple regression analyses were conducted to assess which combination of personality, life events, and an age variable best predicted concepts of death. In the Death as a personal reality factor, age, trait anxiety, the degree to which individuals are presently affected by a past death, neuroticism, and extraversion-introversion accounted for a significant amount of variability. The degree to which an individual was affected in the past by another's death, neuroticism, age, and the degree to which individuals were presently affected by a past death accounted for a significant amount of variability in the Orientation to immortality concept. The significant amount of variability accounted for in the Environment with regard to death factor was found with inner direction, the degree to which individuals were affected by a past death of another, neuroticism, and trait anxiety. In the Emotionality associated with death factor, neuroticism, state anxiety, inner direction, age, and the degree to which individuals were affected both in the present and in the past by another's death accounted for a significant amount of variability. Suggestions made for future researchers included determining which additional variables predict the four concepts of death factors.

# CONCEPTS OF DEATH: ARE FEAR AND ANXIETY THE ONLY COMPONENTS?

#### INTRODUCTION

To recognize that our society tends to discourage a straightforward appreciation of the fact of death does not require extensive investigation. Even though the awareness of death is an ancient topic, the actual psychology of death is a topic we would prefer to ignore. And until very recently, psychologists made only peripheral contact with one of humankind's most pervasive and apposite concerns. Kastenbaum and Costa (1977) suggest that perhaps Freud's assertion, "since we 'know' that we cannot know death, what would be the point of research?" (quoted in Kastenbaum & Costa, 1977, p. 228), exercised a stifling effect upon inquiry. Unfortunately, for a number of years it seems Freud's authority served to dismiss death as a nonproblem.

Historically, the late 1960s and early 1970s were periods of resurgent psychological awareness of death; more specifically, two elements emerged as the focus of interest. The one looked at the psychological state and the management of the dying patient; the other considered fear of death not only in dying people, but also in a variety of additional populations. Diverse methodologies (e.g., Kastenbaum & Costa, 1977; Kurlychek, 1978-79; Pollak, 1979-80) were applied in research on the topic of death anxiety, but the three most commonly employed methods of assessment were interviews, projective techniques, and questionnaires.

Lester (1967) reviewed techniques used to measure the fear of death, and posed questions regarding the validity of the measuring

instruments. In addition, Lester was concerned with the relevance of the variables chosen to be analyzed with fear of death, and their potential contribution to lack of consistency in measurement. He further questioned whether the various measurement instruments were assessing the same dimension of death anxiety. He emphasized that fear of death can have several dimensions: fear of one's own death, fear of the death of others, and fear of the effects of death. Yet, researchers failed to distinguish among these dimensions and collectively considered them fear of death. Researchers in the 1970s seemed to overlook the influence of the multidimensional qualities of death on the individual and his/her attitudes toward death. Consequently, the major emphasis of death research was on the construction of scales that were both reliable and valid to measure a unidimensional conceptualization of death.

Many of the available methods for measuring an individual's fear and anxiety regarding death and dying were analyzed by Kurlychek (1978-79). He reported that Sarnoff and Corwin's Fear of Death Scale (1959) had become the first death-fear measure to be validly tested. Sarnoff and Corwin formulated a short, five statement Likert-type scale that was found to correlate significantly with other scales. Based on his concerns with the instruments used to measure fear of death, Lester (1967) developed a Thurstone-type, equal-appearing interval scale that assessed fear of death of self, fear of death of others, fear of dying of self, and fear of dying of others. To operationalize anxiety towards

death, Templer constructed a Death Anxiety Scale (DAS) to reflect a range of personal experiences (1970), for example, death concern, fear of the dying process, and fear of corpses. Through a decade of rigorous testing these scales have survived, and now, with established validity, are used in conjunction with other measures.

These reliable-valid unidimensional death measures typically have been used with personality variables and intuitively related variables including general anxiety, religious belief, and gender (e.g., Florian & Har-Even, 1983-84; Handal, 1969; Hoelter & Hoelter, 1978). Based on past and current research, personality variables that were expected to be related to death anxiety included sociability, emotionality, aggressiveness, sense of time urgency, and calmness. Using the Sixteen Personality Factor Questionnaire (16PF, Cattell, Eber, & Tatsuoka, 1970) and Templer's DAS to measure death anxiety, Neufeldt and Holmes (1979) found that the subjects who were more tense and frustrated exhibited greater death anxiety, as did the subjects who were less socially controlled and precise. Templer (1972) found that the neuroticism scale of the Eysenck Personality Inventory (EPI, Eysenck & Eysenck, 1968) was positively correlated with death anxiety. Howells and Field (1982), in using the EPI, also confirmed that neuroticism (emotionality) was significantly related to fear of death. Eysenck's scale was also utilized by Loo (1984) in conjunction with Collett and Lester's Fear of Death and Dying Scale (FODDS, 1967). Consistent with other previous findings, measures of neuroticism

showed a significant positive correlation with death anxiety as measured by the Fear of Death and Dying Scale; yet, the extraversion and lie scales were found to be independent (Loo, 1984). Using a word-association task, Templer (1970) demonstrated that higher death anxiety scores were obtained by subjects who responded with emotional words. More recently, Frazier (1986) also found that emotionality best predicted scores on both the DAS and Sarnoff and Corwin's (1959) Fear of Death Scale. In addition, extraversion and Type A behavior patterns, were discovered to be significant, but less important predictors of death anxiety.

Measures of both state anxiety and trait anxiety in relation to eight types of fear of death were examined by Hoelter and Hoelter (1978). Results indicated fear of death to have significant positive correlations with both measures of anxiety. Previous findings by Handal (1969) also showed a significant positive correlation between general anxiety and death anxiety. In contrast to consistent findings concerning anxiety, measurements of many generalized variables have produced conflicting results relating to death fear or death anxiety measures. One prominent example concerns religious beliefs. In 1974 Ray and Najman found that religious unbelievers were more accepting of death than religious believers. Rosenheim and Muchnik (1984-85) found religiosity to be less important in determining death concerns, yet Florian and Har-Even (1983-84) furnished evidence that religious persons indicate greater fear than the nonreligious. Therefore, it is not

clear if religious individuals have high fear of death, intensified by their religiosity, or high fear and then became religious.

Another possible explanation is that because they are religious, individuals have less fear of death. Gender was another variable of considerable interest in its relation to death anxiety, but, again, findings were inconsistent. DaSilva and Schork (1984-85) suggested that females were more comfortable than males in dealing with death-related issues. Both Templer (1970) and Loo (1984) found no gender differences with regard to degree of death anxiety, yet Howells and Field (1982) demonstrated that female students proved to be more fearful than males.

As numerous studies in the late 1970s and early 1980s exemplify, the climate of empirical psychological investigations concerning death was one not only of confusion, but also of conflict. In searching for clarification of the complexities of death attitudes, researchers began to focus on providing a multidimensional orientation toward death. Recent scales have concentrated on the measurement of components such as death concern, threat of death, acceptance of death, fears about death or dying of self and others, denial or avoidance of death, and reluctance to interact with the dying (Durlak & Kass, 1981-82). These numerous dimensions supposedly characterize individual cognitive and attitudinal-affective reactions to death simultaneously.

Hoelter (1979) proposed eight fear-of-death dimensions: fear

of dying process, fear of the dead, fear of being destroyed, fear for significant others, fear of the unknown, fear of conscious death, fear of body after death, and fear of premature death.

Walkey (1982) pointed out that Hoelter's multidimensional fear of death scale used as an item pool a combination of Boyar's Fear of Death Scale, Templer's DAS, and a group of items written by Hoelter—singularly these are unidimensional scales. Many such measurement techniques stimulated skepticism in the research literature over both the number of dimensions being measured and whether the dimensions were assessing unique parameters. In the mid 1980s Littlefield and Fleming boldly asserted, "The instruments of measurement thus far have failed to adequately deal with issues relating to death and dying, particularly with regard to the development of a demonstrable theory" (1984-85, p. 137).

Perhaps the seeming lack of progress in death research can be attributed to a consistent concentration on only factors associated with fear and anxiety, and a lack of consideration of other potentially relevant emotions and variables. Further confusion may have been courted by the interchangeable usage of the terms fear of death and death anxiety. Anxiety is psychodynamically considered to be rooted in the unconscious and can be seen in a free-floating generalized state of apprehension. Fear, however, is believed to be the product of a consciously perceived threat (Littlefield & Fleming, 1984-85).

Assuming anxiety is held in the unconscious, then one is led to

question if scores accurately represent low anxiety, or reflect repression and vigorous defense mechanisms. As with other death related issues, in the last two decades the argument has raged from one extreme view to the other. However, in a recent experiment, Littlefield and Fleming (1984-85) measured reaction times to neutral and death words on a word association test. If persons with low fear of death scores are repressing, then their latency of response to death words should be longer than to neutral words. Findings indicated this was not the case, undermining the repression interpretation of low fear of death, and suggesting that low scores do, in fact, mean low fear of death. It is important to point out that these data appear to reflect a state measure of death fear, and the association between fear and underlying trait anxiety needs further clarification. This point is substantiated by Durlak and Kass (1981-82) who found that "the names of several instruments inaccurately identify the constructs being assessed," (p. 139) and future researchers need to be more precise or "the cumulative results of death studies are apt to be continually confusing and misleading." (p. 139).

As the above review of empirical evidence demonstrates, there has been a consistent cry from the late 1960s to the present for a true multidimensional approach to the study of death. Past researchers seem to grasp at pieces of the issue without considering death as a central entity that is influenced not only by emotional factors (i.e., fear), but also, by trait factors,

cognitive factors, and environmental factors. In addition, because of potential changes in these factors across the lifespan, a complete picture cannot be created without consideration of individuals representative of all age groups. The implications of these changes have previously been ignored because the majority of death research has been conducted exclusively with college students (Durlak & Kass, 1981-82; Hoelter & Hoelter, 1978; Littlefield & Fleming, 1984-85; Templer, 1970). With developmental changes occurring in every area of individuals' lives as they age, it is ludicrous to assume that these changes would not affect, and be affected by, lifespan changes in conceptualizations about death.

The formulation of the following exploratory investigation of the nature of death conceptualizations has been gleaned both from the review of empirical evidence to date and from the past research findings of the author (Frazier, 1985). The present multidimensional conceptualization of death was based on individual responses to a 21-question interview which was conducted by the researcher (Frazier, 1985; see Appendix A). The subjects ranged in age from 18 through 68. The interview questions were open-ended and the participants' responses were taped. As the tapes were reviewed, each interview was transcribed verbatim. These answers were then consolidated by question within specified age groups. A thorough review of the responses to the interview questions provided convincing evidence that individuals' concepts of death are diverse and complex, and include more than the unidimensional

aspects of fear of death or death anxiety. For example, many subjects expressed sadness as the primary emotion they associate with death. Therefore, the present researcher formulated hypotheses about which factors other than fear or anxiety compose an individual's conceptualization of death. An additional objective was to determine, relative to these death factors, how much of the variability in individuals' concepts of death can be attributed to personality factors, cognitive factors, and environmental factors.

To measure the multidimensional nature of death concepts an item pool was created from the responses to the previously discussed interviews (Frazier, 1985). These items were administered to subjects ranging in age from young adulthood through old age. The multidimensional death factors expected to emerge were:

- 1. Consideration of death as a personal reality
- 2. Orientation to immortality
- 3. Environment with regard to death
- 4. Emotionality associated with death

The first factor, death as a personal reality is generally conceptualized not as vaque awareness of our personal mortality

<sup>&</sup>lt;sup>1</sup>In the present context and accordant with past research, multidimensional will be defined as many factors, or multifactorial, and will not refer to a statistical concept.

facticity), but as deliberate and thoughtful realization of death and the possibilities of its immediacy. According to Heidegger (as translated by McCall, 1983), only a person knows of "the inevitability of his own ceasing-to-be-as-a-human-being" (p. 85). Further, the all-important truth is that it is death that gives meaning to life. Therefore, the personal reality of death has previously been considered philisophically, but not empirically, as one component of the individual's awareness of death.

The second component, orientation to immortality, includes concepts ranging from no consideration of its existence to a clear, well-formulated belief of what immortality entails. If applicable for the individual, the importance of close friends, relatives, and children as contributing to immortality will be addressed.

Orientation to immortality as a component is expected to provide replicable and predictable results not found in past research with the use of the somewhat similar concept, religiosity (Florian & Har-Even, 1983-84; Rosenheim & Muchnik, 1984-85).

Environment with regard to death, the third factor, will encompass perceived parental and/or authoritarian attitudes about death, influential convictions of relatives and friends, and frequency of discussions of death. From a phenomenological perspective, "we learn about death through the repeated experience of the death of others," (McCall, 1983, p. 85). It was believed that this component would emerge not only as the result of direct experience with death, but also as the product of indirect

experience, for example, open discussions about death with family and/or friends.

The fourth predicted component, emotionality associated with death, included the many aspects of fear and anxiety previously considered, and in addition included emotions such as sadness, loneliness, relief, despair, and depression related to death. All of these emotions in relation to death were communicated to the author in the course of the previously mentioned interviews (Frazier, 1985).

The Concepts of Death Questionnaire (CDQ) was formed from the combination of the items for the four factors. The CDQ was administered in conjunction with Templer's DAS and Collett & Lester's FODDS. It was predicted that the anxiety, fear, and hypothesized emotionality items would load onto the same factor and that the remaining items would load onto three additional orthogonal factors.

In addition to the death-related items, subjects also completed the Eysenck Personality Inventory (Eysenck & Eysenck, 1968); the Personal Orientation Inventory (Shostrom, 1966); the State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970); the Marlowe Crowne Personal Reaction Inventory, a measure of social desirability (Crowne & Marlowe, 1964); and demographic information (including life experiences with death information). These variables were used to predict the four death factors. No relationship between the multidimensional measure of death and the

social desirability measure was predicted.

Because the death factors themselves are based on exploratory hypotheses, predictions of the variability for each factor becomes an extremely complex, perhaps even incongruent, task. However, as mentioned previously, based on past empirical findings and the researcher's interview data (Frazier, 1985), some speculative hypotheses were warranted:

- 1. Personality and self-actualization were hypothesized to be the best predictors of death as a personal reality, but also, life experiences with death would be an important consideration.
- 2. Time competence, as measured by the Personal Orientation Inventory, was expected to be the best predictor of orientation to immortality.
- 3. Environment with regard to death would best be explained by life experiences with death for the most part, with some variability accounted for by personality.
- 4. The factor, emotionality associated with death, was hypothesized to be best predicted by the measurement of affect, and possibly by age.

#### **METHOD**

### Subjects

Participants in this study were 163 volunteers ranging in age from 15 to 86 (M age = 40.78 years, SD = 20.60). They were obtained from various sources including a southeastern college, small business groups, organizations for the aged, and personal contacts. The sample was composed of 101 females and 62 males (for females, M age = 40.46 years, SD = 19.67; for males, M = 41.31, SD= 22.16). The majority of subjects had some college education.

## Materials

Subjects completed seven questionnaires designed to measure concepts of death, death anxiety, fear of death, personality dimensions, state and trait emotions, social desirability, and demographic information. Some items were forced choice, others were Likert-type format. The demographic information and the life experiences with death items required brief written responses. Following is a description of each of the components measured:

Concepts of Death Questionnaire (CDQ). This measurement device was developed by the present researcher to measure the multidimensional components of an individual's concepts of death. The creation of the items for the item pool was based on hypothesized factors identified in the interviews previously discussed (Frazier, 1985). The purpose of this questionnaire was to demonstrate that components of individual's concepts of death encompass more than fear and anxiety. A copy of the items written

for each component can be found in Appendix B.

Death Anxiety Scale (DAS). The DAS was designed to measure a person's anxieties about death and events associated with dying, such as terminal illness and painful death (Templer, 1970).

Test-retest reliability of Templer's scale over a three-week period was .83. The measure also exhibited both construct and criterion validity (Templer, 1972). A copy of the DAS can be found in Appendix C.

Fear of Death and Dying Scale (FODDS). Developed by Collett and Lester (1967), this scale was comprised of items that measure four separate aspects of death fears. The dimensions measured were fear of death of self and others, and fear of dying of self and others. A copy of the FODDS can be found in Appendix D.

Eysenck Personality Inventory (EPI). This scale assesses personality along two independent dimensions: extraversion-introversion and neuroticism (Corsini & Marsella, 1983). The first dimension measured the tendency of the person to be impulsive, outgoing, and sociable as opposed to being more restrained, introspective, and quiet. Neuroticism was measured along a low-high continuum that reflects the person's inclination to overreact emotionally to situations. In addition, embedded in the EPI was a nine-item lie scale which was also evaluated.

Personal Orientation Inventory (POI). The POI is a measure of 14 subscales designed to measure different aspects of self-actualization, primarily time competence and inner-direction.

The individual who is high in time competence lives more in the here-and-now, does not resent the past, and has faith in the future without rigid goals. The inner-directed person is guided by internal motives rather than external influences (Shostrom, 1966).

State Trait Anxiety Inventory (STAI). Developed by

Spielberger, this scale measured two components of general

anxiety. State anxiety was defined as a transitory emotional state
or condition that varies in intensity and fluctuates over time.

Trait anxiety, on the other hand, referred to relatively stable
individual differences in anxiety proneness (Spielberger, Gorsuch,

& Lushene, 1972).

Marlowe Crowne Social Desirability Scale. This scale was presented as a personal reaction inventory and was used in determining the degree to which the subject responded to experimental demand in a pleasing way (Crowne & Marlowe, 1964).

Demographic information. Subjects were asked to identify their gender, age, socio-economic information, current address, and information about their parents. Life experiences with death were assessed by subjects' identification, by relationship, of individuals emotionally-close to them who have died. They were also asked the degree to which each death affected them at the time and currently. A copy of these items can be found in Appendix E. Procedure

Participants were contacted in a variety of ways. Individuals in the younger age group were recruited from an Introductory

Psychology course at a small southeastern college. Subjects in the older age groups were obtained through personal contacts. The researcher telephoned acquaintances in the school systems, church groups, and retirement communities. These individuals solicited participants in their particular setting.

Prior to completing the questionnaires, participants were told that the purpose of gathering these data was to gain a more complete understanding of the habits, attitudes, and experiences of adults on issues pertaining to life and death. As illustrated in Appendix F, the researcher also explained that their participation was voluntary, that their responses would be held in strictest confidence, and that they could refuse to answer any question asked and discontinue participation at any time. The CDQ, DAS, and FODDS items in random order comprised one comprehensive questionnaire. These items were responded to on a 7-point scale with endpoints labeled strongly agree and strongly disagree. The POI as one measure, and the EPI and social desirability scale in random order as another, were both forced choice. The STAI was presented as a 4-point scale ranging from always to never. None of the scales were individually identified for the subjects. The order of the questionnaires was distributed randomly across subjects. Subjects were asked in the demographic questionnaire to indicate if they were interested in the results of the study. Subjects who responded "yes" were mailed a copy of the abstract of the paper.

#### RESULTS

A confirmatory factor analysis was conducted to test the hypothesis that an individual's concepts of death are multidimensional rather than a unitary phenomenon. To determine the relative discriminative power of the items on the Concepts of Death Questionnaire (CDQ), an item analysis was next performed. Further analyses were conducted using a stepwise multiple regression technique to assess which combination of personality and experimental variables best predict concepts of death. Finally, Pearson correlations were utilized to consider the relationships among the CDQ and the other measures in the study.

## Principal-Components Factor Analysis

To test the hypothesis that an individual's concepts of death were multidimensional, being composed of four factors, a principal-components factor analysis and varimax rotation was performed (Kim & Mueller, 1978a; 1978b). Four factors, which accounted for 41.0% of the variance, were extracted. Table 1 presents the four-factor rotated solution of the CDQ.

Insert Table 1 about here

As a preset criterion, all items that had factor loadings of less than .30 were deleted. The items that loaded most highly on Factor I (CDQ items 3, 6, 18, 35, 64, 78, 87, 95, 98, 101, 106, 109, 119, 125, 130, 139, 140, 142, 145, 148) clearly reflected the predicted

emotionality associated with death concept. Factor II. (CDQ items 20, 40, 45, 65, 71, 90, 91, 99, 105, 112, 118, 120, 121, 123, 129, 138) represented the predicted orientation to immortality concept. Factor III (CDQ items 1, 12, 17, 19, 37, 63, 80, 85, 93, 96) indicated the predicted death as a personal reality concept. The fourth predicted concept, environment with regard to death, emerged as Factor IV (CDQ items 14, 22, 58, 73, 75, 88, 109, 113, 115, 132, 149). Factorial determination, or the proportion of variance in the items explained by the factor, averaged over the number of items that load onto that factor, was computed. The variance in Factor I, emotionality, accounted for 34.3%; Factor III, orientation to immortality accounted for 37.8%; Factor III, death as a personal reality accounted for 33.5%; and Factor IV, environment, accounted for 29.1%.

This analysis provides support for the hypothesis of the multidimensionality of an individual's concepts of death.

Emotionality associated with death, orientation to immortality, death as a personal reality, and environment with regard to death clearly emerged as four factors characteristic of the nature of individuals' thoughts and feelings about the concepts of death as measured by the CDQ.

### Item Analysis of the CDO

An item analysis, using a correlational approach, was performed on the items remaining after those below the .30 preset factor-loading criterion were deleted. The purpose of the item

analysis was to determine the relative discriminative power of each of the remaining items of the CDQ. Scores on each of the items were correlated with the total score for each of the four factors. This item-to-total correlation analysis, found in Table 2, indicated how well an individual item was measuring what that particular factor purported to measure.

Insert Table 2 about here

Item correlations were positive for all factors. For emotionality associated with death, the correlations ranged from .34 to .72, with an average of .53. To measure the reliability of each scale, Cronbach's alpha was utilized. This measure for emotionality was .90, p < .001. For orientation to immortality correlations ranged from .30 to .71, with an average of .55. Cronbach's alpha was .88, p < .001. The item-to-total correlations for death as a personal reality ranged from .31 to .62, an average of .45, with a Cronbach's alpha of .78, p < .01. For environment with regard to death they ranged from .15 to .59, with an average of .42. A Cronbach's alpha of .76 (p < .01), was found. These correlations indicate that each item in a particular factor contributed appreciably to the measurement of that factor.

## Multiple Regression Analyses

Based upon the four factors that emerged from the previously mentioned factor analysis, factor scores were created for each of

the four factors (death as a personal reality, orientation to immortality, environment with regard to death, and emotionality associated with death). Four stepwise multiple regression analyses were conducted to assess which combination of personality, life events, and an age variable best predicted concepts of death. The personality variables used as predictors were neuroticism, extraversion-introversion, time competence, inner direction, state anxiety, and trait anxiety. The predictor measures of life events were the degree to which a past experience with another's death affected you at the time, and the degree to which that death affects you in the present. Higher scores indicated higher emotionality, extreme extraversion, more time competence, more inner direction, higher state anxiety, and higher trait anxiety. For past experience of another's death, higher scores showed that the individual was more affected. Higher scores for present experience also indicated more affect.

Regarding the four criterion measures, lower scores indicated a more precise concept of death as a personal reality; lower scores showed more orientation to immortality; environment with regard to death was also defined by lower scores; however, higher scores indicated greater emotionality.

Death as a personal reality. Evaluating the death as a personal reality factor scores, five significant predictor variables were found which together were responsible for 21.4% of the variability in an individual's concepts of death. Table 3

indicates that age was the best predictor of death as a personal reality, accounting for 12.8% of the variability. Consistent with the hypotheses, this result suggested that as individuals age, death becomes more of a personal reality to them.

Insert Table 3 about here

Although the measure of trait anxiety was not significantly correlated with the death as a personal reality factor, it was the next best predictor, accounting for 4.7% of the variability.

Therefore, the more individuals have a relatively stable tendency to be anxiety prone, the more death will be a personal reality.

The measurement of the degree to which individuals are affected by the death of another at the present time was the third best predictor of death as a personal reality, accounting for 2.4% of the variability. In other words, individuals who are currently more affected by the death of another, experience death more as a personal reality.

Also, as Table 3 shows, neuroticism and extraversion-introversion, though significant predictors, accounted for less than 2.0% of the variability in the death as a personal reality concept. Individuals who are inclined to overreact emotionally to situations, and who are impulsive, outgoing, and sociable have less of a grasp of death as being a personal reality.

Orientation to immortality. A second stepwise multiple regression was conducted using the same set of predictor variables

to explain the orientation to immortality factor. As with the death as a personal reality concept, three of the same significant predictor variables were found; yet, the proportions of their variability were distributed differently, as illustrated in Table 4. Not only were distributions of variability different, but also the total explained variability of 7.4% was much less than that of the death as a personal reality concept.

Insert Table 4 about here

Past experience with death, a significant predictor that did not emerge for the death as a personal reality concept, was the best predictor of the orientation to immortality factor, accounting for 4.1% of the variability. This finding suggested that individuals who were more affected in the past by experiences with death are more oriented to immortality.

The next best predictor of individuals' orientation to immortality was neuroticism, accounting for 1.4% of the variability. If individuals are more likely to overreact emotionally to situations, then they are less likely to have a strong orientation to immortality.

The last two significant predictors to emerge, together accounting for less than 2.0% of the variability in the orientation to immortality concept, were age and the degree to which individuals are presently affected by the past experience with

to explain the orientation to immortality factor. As with the death as a personal reality concept, three of the same significant predictor variables were found; yet, the proportions of their variability were distributed differently, as illustrated in Table 4. Not only were distributions of variability different, but also the total explained variability of 7.4% was much less than that of the death as a personal reality concept.

Insert Table 4 about here

Past experience with death, a significant predictor that did not emerge for the death as a personal reality concept, was the best predictor of the orientation to immortality factor, accounting for 4.1% of the variability. This finding suggested that individuals who were more affected in the past by experiences with death are more oriented to immortality.

The next best predictor of individuals' orientation to immortality was neuroticism, accounting for 1.4% of the variability. If individuals are more likely to overreact emotionally to situations, then they are less likely to have a strong orientation to immortality.

The last two significant predictors to emerge, together accounting for less than 2.0% of the variability in the orientation to immortality concept, were age and the degree to which individuals are presently affected by the past experience with

another's death. Findings indicated that older individuals who are presently more affected by another's death are more oriented to immortality.

Environment with regard to death. Once again, a stepwise multiple regression was conducted with the same set of predictor variables to explain the environment with regard to death factor. As Table 5 shows, this factor shared one similar significant predictor with the orientation to immortality concept, and two similar significant predictors with the death as a personal reality factor. Although the total explained variability of 13.7% in the environment concept was greater than the orientation to immortality factor, it was less than the death as a personal reality concept.

# Insert Table 5 about here

A significant predictor not previously found, inner direction, was the best predictor of environment with regard to death, accounting for 10.6% of the variability. This result demonstrated that the more individuals were guided by internal motives rather than external influences, the more comfortable they were when the topic of death becomes a part of their environment.

The next best predictor, the degree to which past experience with death affected individuals at the present time, accounted for 2.0% of the variability in the environment factor. The more affected individuals were by past experience with death, the more

they were accepting of death in their environment.

As Table 5 illustrates, neuroticism and trait anxiety, although significant predictors of the environment concept, accounted for only slightly more than 1.0% of the variability. The more likely individuals were to overreact emotionally and to be relatively consistently anxiety prone, the less tolerant they are of the topic of death in their environments.

Emotionality associated with death. The final stepwise multiple regression was conducted using the same set of predictor variables as previously, to explain emotionality associated with death. This factor not only accounted for the most total explained variability of 36.7%, but also indicated the largest number of significant predictor variables, as Table 6 illustrates.

#### Insert Table 6 about here

Not surprisingly, the best predictor of the emotionality component was neuroticism, accounting for 26.0% of the variability. Individuals who tended to overreact emotionally to situations, also tended to respond emotionally to the topic of death.

Although accounting for much less of the explained variability, only 3.1% in the emotionality factor, state anxiety was the next best significant predictor variable to emerge. This result revealed that individuals who were temporarily in an emotional

state reported more emotionality associated with their view of death.

Also, as Table 6 shows, inner direction was the third significant predictor of the emotionality concept, accounting for slightly less than 2.0% of the variability. Individuals who were less guided by internal motives and were externally influenced exhibited more emotionality over the topic of death.

Age was the next significant predictor, accounting for 2.1% of the variability in the emotionality concept. As individuals age, they become less emotional over the issue of death.

The degree to which individuals were presently affected by the past death of another was the fifth significant predictor of the emotionality factor, although it accounted for only 1.2% of the variability. This finding suggested that the more individuals were presently affected by death, the more emotional they were about death.

The final significant predictor of the emotionality concept to emerge was how affected individuals had been in the past over the death of another. As Table 6 shows, this variable accounted for 2.6% of the variability, and indicated that the more individuals were affected by past experience with death, the less emotional they are about the issue of death now. Consistent with the findings for age, this result suggested that individuals have probably learned to deal with death over time.

#### Pearson Correlations

In order to assess the relationships among the four factors of the CDQ and Templer's DAS and Collett and Lester's FODDS, Pearson correlations were conducted. As can be seen in Table 7, most of the significant correlations were found in the environment with regard to death and emotionality associated with death factors.

Insert Table 7 about here

The only significant correlation in the death as a personal reality factor was with the death of others subscale of Collett and Lester's FODDS. The relationship was positive which was not surprising because the death as a personal reality factor purported to measure how realistically individuals face death, and the dying of others subscale appears to measure the ability of individuals to deal with others' deaths.

The orientation to immortality concept showed positive, significant correlations with Collett and Lester's death of self and dying of others subscales. Yet, it is important to note that these are very low correlations. This finding suggested that individuals who were more aware of their own deaths, and who could face the dying of others were more oriented to immortality.

As Table 7 illustrates, four significant correlations were found with the environment with regard to death concept. The analysis revealed a significant, but negative, correlation between

environment and Templer's DAS. As expected, the more anxious individuals were about death, the less willing they were to be open to the topic of death. All of the Collett and Lester subscales showed positive, significant correlations with the environment concept, except the subscale death of others. The Collett and Lester subscales appear to measure not only emotionality regarding death, but also individuals' receptivity to the topic of death; therefore, the positive relationship between these subscales and the environment concept was understandable. With the exception of the others' dying, these correlations accounted for low variability.

As expected, the emotionality factor was significantly correlated with the DAS and all subscales of the FODDS. The significant correlations with the DAS were negative, yet with the FODDS were positive.

As illustrated in Table 8, Pearson correlations were also conducted among the CDQ factors, Templer's DAS, Collett and Lester's subscales, and the lie scale of the EPI and the Marlowe Crowne social desirability scale.

Insert Table 8 about here

These analyses revealed a significant, although statistically meaningless, correlation between the orientation to immortality concept and social desirability. Significant correlations were

also found for both the lie and social desirability scales with the emotionality concept, the DAS, and all subscales of the FODDS.

In order to determine the effects of the significant correlations with social desirability, additional multiple regression analyses were conducted with social desirability partialed out. Consistent with the correlations in Table 8, these multiple regression analyses produced almost no differences in the death as a personal reality and environment with regard to death factors. The explained variability in the orientation to immortality and emotionality factors was reduced, but the predictors did not change.

## DISCUSSION

The findings of the present research indicate that individuals! concepts of death are multidimensional rather than a unitary phenomenon. Consistent with the hypothesis and with research previously reviewed (Durlak & Kass, 1981-82; Frazier, 1985; Hoelter, 1979), four distinct factors clearly emerge from the analysis. Items that were indicative of individuals' deliberate and thoughtful realization of death and the possibilities of its immediacy, clustered together and verified the death as a personal reality concept. The hypothesized items concerning individuals! clear, well-formulated beliefs of what immortality entails aligned together and confirmed the orientation to immortality component of concepts of death. The environment with regard to death concept was also substantiated because the items postulated to represent environment grouped together. The fourth predicted component materialized and the items clearly indicated an emotionality component in individuals' concepts of death. Therefore, as predicted, individuals' concepts of death are not unidimensional, but are composed of at least four components which include death as a personal reality, orientation to immortality, environment with regard to death, and emotionality associated with death.

An additional objective of the present research was not only to emphatically demonstrate that individuals' concepts of death are multidimensional, but also to unquestionably show which factors other than fear or anxiety compose individuals' conceptualizations

of death. As mentioned previously, other researchers (Durlak & Kass, 1981-82; Hoelter, 1979; Walkey, 1982) have focused on providing a multidimensional orientation toward death. However, as Littlefield and Fleming (1984-85) point out, these measurement instruments have failed to deal adequately with the issues related to death and dying. A possible explanation of the insufficiencies of death measures is that they are not multidimensional, but are simply measures of different aspects of one concept, fear. In contrast, the analysis of the Concepts of Death Questionnaire in the present research, obviously indicated that there is not only an emotionality component to individuals' concepts of death, but also there are three additional completely orthogonal concepts. With the objective of adding clarification and substance to the existing body of literature, further analyses were conducted in the study to evaluate the relationships among these individuals' concepts of death and personality, life events, and age variables.

Because the death factors were based on an exploratory hypothesis, the predictions of the relationships among the concepts of death and other variables were speculative. And, although a few of the findings do not support of these speculative hypotheses, they are extremely informative in light of the definitions of each of the concepts.

For the death as a personal reality concept, personality, self-actualization, and life experiences with death were hypothesized to be the best predictor variables. Even though these

variables were not the first to emerge, not surprisingly, the best predictor of death as a personal reality was age. Older individuals have had the opportunity to become more aware of the shortness of remaining time and have had more experiences with death, and with the prospect of death. Therefore, it is perfectly logical to purport that they would have a deliberate and thoughtful realization of death and the possibilities of its immediacy.

As hypothesized, a personality variable, trait anxiety, was the next predictor to emerge. Trait anxiety is a relatively stable tendency of an individual to be anxiety prone. It would be expected that an individual with an underlying tendency to be anxious would give more thought to the ultimate unknown we all must face.

The next predictor of the death as a personal reality concept was life experiences with the death of another. Individuals who are presently affected by the past death of another, experience death as more of a personal reality. If these individuals report being strongly affected by death on a day to day basis, it follows that death would be very real to them.

Two additional personality variables, neuroticism and extraversion, also predicted the death as a personal reality concept. Neuroticism, unlike trait anxiety, is more of a measure of emotional overreactivity than a stable underlying trait.

Tendencies of both neuroticism and extraversion imply characteristics of individuals who are not self-actualized. This

analysis revealed that these individuals have less of a grasp of death as being a personal reality.

Findings for the next concept, orientation to immortality, were disappointing. The hypothesized best predictor, time competence, did not emerge. However, the variables that were significant predictors are not startling. The degree to which individuals were affected by the death of another predict their orientation to immortality. Quite obviously, if individuals give considerable thought to the death of another, they are going to formulate opinions regarding eternal life.

Inconsistent with previous findings by Florian and Har-Even (1983-84), the next predictor, neuroticism, indicated that individuals who are more likely to overreact emotionally to situations, are less likely to have a strong orientation to immortality. This finding is consistent with the idea that the more thoughtful, calm individual would not only have carefully considered the death as a personal reality concept previously mentioned, but also would have a clear, well-formulated belief of what immortality entails. Further, as these results showed, it is not surprising to find that older individuals are more oriented to immortality. Older individuals may be more aware of the shortness of their remaining time and, therefore, may have given more consideration to what is to follow; or, they may have grown up in a period when religiosity and an orientation to immortality were more important than they are to young people today.

Environment with regard to death, the third component, was hypothesized to be best explained by life experiences with death, and personality of the individual. The results of the analyses supported this hypothesis. A personality variable, inner direction, was the best predictor of environment with regard to death. This finding logically follows those for the other concepts, such that, individuals who are guided more by internal motives and not external influences, and are more thoughtful about death and eternal life, are also more comfortable with the topic of death in their environment.

As expected, the degree to which individuals are presently affected by past experiences with death was the next best predictor of the environment with regard to death concept. One would anticipate, as shown here, that if individuals had past experiences with death and continued to be influenced by them, then they would be more willing to accept death as part of their environment.

The last two predictors, neuroticism and trait anxiety, accounted for very little of the variability in the environment factor. However, once again, it is not surprising to find that individuals who tend to overreact emotionally or who are relatively anxiety prone, would rather keep the topic of death out of their environment.

The hypotheses regarding the fourth and final component, emotionality associated with death, were somewhat less speculative because of the substantial body of literature presenting death as

an exclusively emotional issue (Howells & Field, 1982; Loo, 1984; Sarnoff & Corwin, 1959; Templer, 1972). Measures of affect and age were expected and were found to best predict the emotionality concept. Also, because this component is the most clearly understood, as the previous review indicates, it was not shocking to find that it accounted for the most total explained variability.

Neuroticism best predicted the emotionality factor, indicating that individuals who tend to overreact emotionally to situations, also tend to respond emotionally to the topic of death. Although this finding is consistent with past research (Frazier, 1986; Howells & Field, 1982; Loo, 1984; Templer, 1972), it is important to emphasize that the emotionality concept is not just a measure of anxiety, but includes emotions such as sadness, loneliness, relief, despair, and depression related to death.

A measure of a temporary emotional disposition, state anxiety, was the next best predictor of the emotionality concept. Although it accounted for much less of the variability than neuroticism, this result suggests that individuals who are momentarily in an emotional state report more emotionality associated with their view of death.

Consistent with the line of reasoning developed for the previous concepts, the appearance of inner direction as the next predictor provides substantiation. Individuals who are more thoughtful about death and eternal life, and who are comfortable with the topic of death in their environment, are also less emotional regarding death.

In addition, assuming that individuals may become more inner directed as they grow older, it is not surprising that the next predictor was age. This finding revealed that older people exhibit less emotionality associated with death. Once again, older individuals have had more time to deal with the finitude of their lives, and have probably had more direct experience with death; therefore, death has become more real and less of an emotional issue to them.

The final two predictors of the emotionality concept were both present and past affect of individuals' who had life experiences with death. Individuals who are presently more affected by the past death of another show more emotion associated with death. Apparently, because these individuals are still emotional over the death of another, any mention of death is an emotional experience for them. In contrast, individuals who were affected at the time by the death of another in the past, report less emotion associated with the topic of death now. These individuals have probably spent more time dealing with death, and as the orientation to immortality and environment results suggest, they are more oriented to immortality and comfortable with death in their environment; therefore, it is reasonable to postulate that they would experience less emotionality associated with death.

To summarize the relationships among concepts of death and personality, life experiences, and age, the present author concludes from these findings that to older, more inner directed,

less anxious individuals who have experienced another's death, the concept of death is more of a personal reality, immortality is more well-formulated, death in the environment is less threatening, and death is less of an emotional issue.

The intricacies of these findings are further complicated by their relationships with Templer's DAS, and Collett & Lester's FODDS. Both of the significant relationships with Templer's scale are negative. These results are not disturbing, but, in fact, provide additional support for a previous proposal by the present author (Frazier, 1985, 1986) that Templer's scale is merely a measure of generalized anxiety. As mentioned previously, the concept was not only a measure of anxiety, but also a measure of other emotions including sadness, loneliness, relief, despair, and depression related to death. On the other hand, significant relationships with Collett and Lester's FODDS are positive and more robust. The items on the FODDS are diverse, and the scale incorporates four subscales. It is reasonable to postulate that the scale unintentionally taps some of the multidimensional aspects of death.

The significant correlations among the emotionality concept of the CDQ, and the lie and social desirability scales were not anticipated. However, it is comforting to note that correlations among these scales and the DAS and FODDS are at least as high, and in many cases higher, than those found with the emotionality concept. These results suggested that perhaps when individuals are

faced with an emotionally-charged, disturbingly-intimate issue, they respond to experimental demand in a pleasing way which serves as a personal defense mechanism.

The relationships with reliable-valid death scales, and the findings presented in the present paper provide conclusive evidence that individuals' concepts of death are multidimensional, and that the Concepts of Death Questionnaire aptly reveals four of these orthogonal conceptualizations of death. Therefore, in response to the original question posed, "Concepts of Death: Are Fear and Anxiety the Only Components?", the answer is emphatically no. The present investigation empirically demonstrated the existence of three other components.

Future researchers should now begin to turn their focus away from the strict anxiety or fear interpretation of individuals' concepts of death. A more appropriate concentration would be to determine which additional personality, cognitive, and general variables best predict the four concept of death factors. Further dissection of the potential underlying lifespan developmental issues revealed by the importance of the age predictor in this study is also recommended.

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Table 1

Four-Factor Varimax Rotated Factor Solution of the Concepts of Death

Questionnaire

		Fact	or loa	ding	
Item		I	II	III	ΙV
Emoti	onality associated with death				
3.	The primary emotion I associate with				
	my own death is fear.	<b></b> 73			
6.	The primary emotion $I$ associate with				
	my own death is sadness.	<b></b> 55			
18.	I am intensely frightened of the				
	potential pain associated with my death.	51			
35.	If I thought realistically about my actual				
	death, I believe I would panic.	71			
64.	I envy plants and animals for apparently				
	being unaware of their own deaths.	49			
78.	The injustice of young people dying makes				
	me very angry.	52			
87.	I am intensely saddened by the thought of				
	the death of my parents.	<b></b> 56			
95.	Death is frustrating to me because it will				
	be the end of my striving towards my goals.	.64			
(cont	inued)				

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87.	I am intensely saddened by the thought of				
	the death of my parents.	<b></b> 56			
95.	Death is frustrating to me because it will				
	be the end of my striving towards my goals.	.64			
(cont	inued)				

Table 1 (continued)

		Fac	ctor loa	ding	
Item		I	II	III	IV
Emoti	onality associated with death				
98.	I don't ever know what to say to friends				
	and relatives of someone who has died.	39			
101.	Thinking of my own death makes me very sad.	<b></b> 75			
106.	I am accepting of the fact that I will die.	.64			
109.	I would much rather put off thinking about				
	death until another time.	45			
119.	Death is unfair.	57			
125.	No one should have to die until he/she is				
	ready to accept death.	52			
130.	I am very calm about dying.	•58			
139.	Death makes me realize that I am				
	totally alone.	.49			
140.	Thinking of death is depressing.	.68			.34
142.	Death to me is cold, desolate darkness.	60	33		
145.	I intensely dislike the fact that I				
	will age.	49			
148.	Death makes me feel helpless and out				
	of control.	71			

Table 1 (continued)

		Fact	tor loa	ding	
Item		I	II	III	IV
Orier	itation to immortality				
20.	My beliefs in immortality influence				
	the way I live from day to day.		.60		
40.	Death is final.		49		
45.	I believe when I die my soul will				
	go to heaven or hell.		.69		
65.	As I grow older, I believe I will fear				
	death less.		.45		
71.	I am aware of not wasting my time because				
	it is so precious.		•50		
90.	As I grow older, I believe my belief in				
	immortality will become stronger.		.57		
91.	I rarely think about immortality.		<b></b> 53		
99.	I believe when my body dies, my soul				
	dies, too.		<b></b> 75		
105.	Because of the injustice in this life, I				
	believe there is only good after death.		.30		
112.	There is a plan for my life overseen				
	by a superior being.		.73		

Table 1 (continued)

		Fac	tor loa	ding			
Item	[tem ]		II	III	IV		
Orien	tation to immortality						
118.	When someone emotionally close to me dies,						
	I will be comforted by the fact that he/she						
	is in a better place.		.77				
120.	I'm not sure that I believe man has a soul.		77				
121.	I believe there is a spiritual superior						
	being.		•59				
123.	I try to live a good life just in case we						
	are accountable for our actions after we die.		•37				
129.	To me the major importance of life is						
	our immortality.		.68				
138.	I look forward to being reunited with friends						
	and loved ones who have died, when I die.		.78				
Death	as a personal reality		<del> </del>		<del></del>		
1.	In planning my future, I think of the						
	fact that my goals may be interrupted						
	by my death.			.69			
12.	When I think of the length of my life,						
	I believe I will probably live to be at						
	least 75.			40			

(continued)

Table 1 (continued)

		Fact	or loa	ading	
Item		I	II	III	IV
Death	as a personal reality		***************************************		
17.	I am often aware that I could die at				
	any time.			•50	
19.	I think I am more consciously aware of				
	death than my friends.			.38	.35
37.	To me death is something very far away.			71	
63.	I think of the death of those around me				
	but not of my own death.			47	
80.	It is very difficult for me to imagine				
	that I will really die.	34		66	
85.	Although I know I will die, I rarely				
	think of myself actually dying.			<b>5</b> 5	
93.	In planning my future, I consider the				
	entire course of my life including				
	my death.			.67	
96.	I can't imagine that I won't live a				
	long life.	. 35		.63	

14. I think death is a topic people should discuss more frequently.

.69

(continued)

		Fact	tor load	ding	
Item		I	II	III	IV
Envir	onment with regard to death				
22.	I would never think of bringing up the				
	topic of death in a discussion at an				
	informal gathering.				54
58.	Death is a topic that should be discussed				
	primarily in religious settings.				46
73.	If a member of my immediate family died,				
	we would talk about our feelings				
	associated with the death.				.50
75.	I would be happy to never talk about death.				50
88.	If my close friend had a terminal illness,				
	I would want to share our feelings about				
	his/her death.				.73
109.	I would much rather put off thinking about				
	death until another time.	48			<b></b> 56
113.	I rarely think of my life beyond about five				
	years in the future.			<b></b> 38	<b></b> 35
115.	I would like to discuss death more				
	frequently.				.65
(cont	inued)				

Table 1 (continued)

		Fac	tor load	ding	
Item		I	II	III	IV
Envir	ronment with regard to death		<u> </u>	<u></u>	
132.	I wish our society was more open and				
	accepting of death and the dying process.				•52
149.	When with someone who is terminally ill,				
	I believe one should behave as if				
	everything is normal.				48

Note. The percentage of variance accounted for by each factor is: Factor I = 34.3%; Factor II = 37.8%; Factor III = 33.5%; and Factor IV = 29.1%. The analysis was based on responses from 163 subjects.

Table 2

Item-to-Total Correlations for the Four Components of the Concepts of

Death Questionnaire

Item		Item-to-total correlation
Emoti	onality associated with death	
3.	The primary emotion I associate with	
	my own death is fear.	68
6.	The primary emotion I associate with	
	my own death is sadness.	50
18.	I am intensely frightened of the	
	potential pain associated with my death.	46
35.	If I thought realistically about my actua	1
	death, I believe I would panic.	66
64.	I envy plants and animals for apparently	
	being unaware of their own deaths.	36
78.	The injustice of young people dying makes	
	me very angry.	43
87.	I am intensely saddened by the thought of	
	the death of my parents.	49
95.	Death is frustrating to me because it will	1
	be the end of my striving towards my goals	s59
(cont	inued)	

Table 2 (continued)

Item		Item-to-total correlation
Emoti	onality associated with death	
98.	I don't ever know what to say to friends	
	and relatives of someone who has died.	37
101.	Thinking of my own death makes me very sad	d72
106.	I am accepting of the fact that I will die	.58
109.	I would much rather put off thinking about	ŧ
	death until another time.	34
119.	Death is unfair.	54
125.	No one should have to die until he/she is	
	ready to accept death.	43
130.	I am very calm about dying.	•53
139.	Death makes me realize that I am	
	totally alone.	.37
140.	Thinking of death is depressing.	.71
142.	Death to me is cold, desolate darkness.	<b></b> 58
145.	I intensely dislike the fact that I	
	will age.	47
148.	Death makes me feel helpless and out	
	of control.	<b></b> 70

(continued)

Table 2 (continued)

Item		Item-to-total correlation
Orien	tation to immortality	
20.	My beliefs in immortality influence	
	the way I live from day to day.	•57
40.	Death is final.	42
45.	I believe when I die my soul will	
	go to heaven or hell.	•59
65.	As I grow older, I believe I will fear	
	death less.	.38
71.	I am aware of not wasting my time because	•
	it is so precious.	.39
90.	As I grow older, I believe my belief in	
	immortality will become stronger.	•50
91.	I rarely think about immortality.	52
99.	I believe when my body dies, my soul	
	dies, too.	68
105.	Because of the injustice in this life, I	
	believe there is only good after death.	•28
112.	There is a plan for my life overseen	
	by a superior being.	.66
(cont	inued)	

Item	I	tem-to-total correlation
Orien	station to immortality	
118.	When someone emotionally close to me dies,	
	I will be comforted by the fact that he/sh	ne
	is in a better place.	.71
120.	I'm not sure that I believe man has a soul	<b></b> 66
121.	I believe there is a spiritual superior	
	being.	•51
123.	I try to live a good life just in case we	
	are accountable for our actions after we d	.30
129.	To me the major importance of life is	
	our immortality.	.58
138.	I look forward to being reunited with frie	ends
	and loved ones who have died, when I die.	.71
Death	as a personal reality	
1.	In planning my future, I think of the	
	fact that my goals may be interrupted	
	by my death.	.49
12.	When I think of the length of my life,	
	I believe I will probably live to be at	
	least 75.	31
(cont	inued)	

Item		Item-to-total correlation
Death	as a personal reality	
17.	I am often aware that I could die at	
	any time.	•41
19.	I think I am more consciously aware of	
	death than my friends.	•32
37.	To me death is something very far away.	62
63.	I think of the death of those around me	
	but not of my own death.	41
80.	It is very difficult for me to imagine	
	that I will really die.	51
85.	Although I know I will die, I rarely	
	think of myself actually dying.	44
93.	In planning my future, I consider the	
	entire course of my life including	
	my death.	.48
96.	I can't imagine that I won't live a	
	long life.	49
Envir	onment with regard to death	
14.	I think death is a topic people should	
	discuss more frequently.	•52
(cont	inued)	

Item		Item-to-total correlation
Envir	onment with regard to death	
22.	I would never think of bringing up the	
	topic of death in a discussion at an	
	informal gathering.	<b>3</b> 6
58.	Death is a topic that should be discussed	
	primarily in religious settings.	33
73.	If a member of my immediate family died,	
	we would talk about our feelings	
	associated with the death.	.34
75.	I would be happy to never talk about deat	h. <b>4</b> 2
88.	If my close friend had a terminal illness	,
	I would want to share our feelings about	
	his/her death.	•52
109.	I would much rather put off thinking about	t
	death until another time.	<b></b> 58
113.	I rarely think of my life beyond about fi	ve
	years in the future.	15
115.	I would like to discuss death more	
	frequently.	.48
(cont	inued)	

## Table 2 (continued)

Item		Item-to-total correlation
Envir	conment with regard to death	
132.	I wish our society was more open and	
	accepting of death and the dying process.	.46
149.	When with someone who is terminally ill,	
	I believe one should behave as if	
	everything is normal.	<b></b> 39
	everything is normal.	39

Table 3

Summary of Correlations and Multiple Regression Analysis Predicting Death
as a Personal Reality (DAPR) Factor Scores

Predictor variable	Pearson correlation	Change in <u>R</u> 2	Unstandard- ized <u>b</u>	Standard error of <u>b</u>	$\pm$ for $\beta = 0$
Age	<b></b> 358 <sup>b</sup>	.128	029	•007	<b>-4.</b> 26 <sup>b</sup>
Trait Anxiety	154	•047	918	.371	-2.47ª
Presently Affe	ected				
by Death	218ª	.024	054	.026	-2.11ª
Neuroticism	•228ª	.011	.978	.760	1.29
Extraversion-					
Introversion	on .139	.004	.680	.071	0.87

Note. All Pearson correlations are based on 145 df.

 $R^2 = .214$ , E (5, 141) = 7.67, p < .001. SD (DAPR) = 1.60,

 $\underline{SE}$  (DAPR) = 1.44.

 $a_{p} < .05.$   $b_{p} < .001.$ 

Table 4

Summary of Correlations and Multiple Regression Analysis Predicting

Orientation To Immortality (ORIMM) Factor Scores

correlation	in R <sup>2</sup>	Unstandard-	Standard error of <u>b</u>	± for β = 0
:e				
203ª	.041	021	.028	-0.77
.128	.014	•904	.671	1.34
173	.010	010	.008	-1.29
cted				
178	.009	043	.038	0.26
	203 <sup>a</sup> .128173	203 <sup>a</sup> .041 .128 .014173 .010	203 <sup>a</sup> .041021 .128 .014 .904173 .010010	203 <sup>a</sup> .041021 .028  .128 .014 .904 .671 173 .010010 .008

Note. All Pearson correlations are based on 136 df.

 $R^2 = .074$ , E (4, 133) = 2.65, p < .05. SD (ORIMM) = 1.77,

 $\underline{SE}$  (ORIMM) = 1.73.

 $a_D < .05$ .

Table 5

Summary of Correlations and Multiple Regression Analysis Predicting

Environment with Regard to Death (ENYMT) Factor Scores

Predictor variable	Pearson correlation	Change in <u>R</u> <sup>2</sup>	Unstandard- ized <u>b</u>	Standard error of <u>b</u>	<u>t</u> for β = 0
Inner Direction	<b></b> 326ª	.106	<b>-5.4</b> 70	1.420	-3.85ª
Past Experient		.020	028	.016	-1.78
Neuroticism	<b>.</b> 178	•005	•985	.737	1.34
Trait Anxiety	.114	.006	.360	•352	1.02

Note. All Pearson correlations are based on 147 df.

 $R^2 = .137$ , E (4, 144) = 5.71, p < .001. SD (ENVMT) = 1.47,

 $\underline{SE}$  (ENVMT) = 1.39.

 $a_{D} < .001.$ 

Table 6

Summary of Correlations and Multiple Regression Analysis Predicting

Emotionality (EMOT) Factor Scores

Predictor	Pearson	Change	Unstandard-		<u>t</u> for
variable	correlation	fn <u>R</u> <sup>2</sup>	ized <u>b</u>	error of <u>b</u>	β= 0
Neuroticism	•510 <sup>c</sup>	.260	1.951	.688	2.84 <sup>b</sup>
State Anxiety	.440 <sup>C</sup>	.031	.848	.322	2.63 <sup>b</sup>
Inner					
Direction	324 <sup>c</sup>	.017	-2.964	1.539	-1.93
Age	162	.021	010	.007	-1.42
Presently Affe	ected				
by Death	.175	.012	.088	•033	2.63 <sup>b</sup>
Past Experienc	ce				
with Death	080	.026	051	.023	-2.25 <sup>a</sup>

Note. All Pearson correlations are based on 131 df.

 $R^2 = .367$ , E (6, 126) = 12.16, p < .001. SD (EMOT) = 1.71,

 $\underline{SE}$  (EMOT) = 1.39.

 $a_{p} < .05.$   $b_{p} < .01.$   $c_{p} < .001.$ 

Table 7

Pearson Correlations Between Death Component Factor Scales and Templer's and Collett and Lester's Fear Scales

	Death Component			
	DAPR	ORIMM	ENVMT	EMOT
Templer:				
DAS	•12	07	28 <sup>C</sup>	<b></b> 77 <sup>c</sup>
Collett & Lester:				
Death of Self	•12	.17ª	.27 <sup>C</sup>	.78 <sup>C</sup>
Death of Others	.12	02	.00	.45 <sup>C</sup>
Self Dying	•06	.10	.37 <sup>c</sup>	.65 <sup>C</sup>
Others! Dying	•23 <sup>b</sup>	.29 <sup>c</sup>	.62 <sup>C</sup>	.60 <sup>C</sup>

Note. All correlations are based on a minimum of 140 df.

 $a_{p} < .05$ .  $b_{p} < .01$ .  $c_{p} < .001$ .

Table 8

Pearson Correlations of Death Component Factor Scales, Death Fear and

Anxiety Scales and Lie and Social Desirability Scales

	Lie Scale	Social Desirability
Death Components:		<del></del>
Personal Reality	12	11
Orientation to Immortality	11	19 <sup>a</sup>
Environment	03	04
Emotionality	26 <sup>b</sup>	33c
Templer:		
DAS	.21b	•38c
Collett & Lester:		
Death of Self	32 <sup>c</sup>	39c
Death of Others	28 <sup>c</sup>	36 <sup>c</sup>
Self Dying	17a	24 <sup>b</sup>
Others' Dying	27 <sup>c</sup>	37 <sup>c</sup>

Note. All correlations are based on a minimum of 139 df.

 $a_{\underline{p}} < .05$ .  $b_{\underline{p}} < .01$ .  $c_{\underline{p}} < .001$ .

## APPENDIX A QUESTIONS FROM THE CONCEPTS OF DEATH INTERVIEW

#### CONCEPTS OF DEATH INTERVIEW

- 1. What comes to mind when you think of death?
- 2. What primary emotions do you associate with your concepts of death?
- 3. How would you describe what happens at death?
- 4. What kinds of things influenced your concepts about death?
- 5. Do you ever discuss death? If so, with whom?
- 6. Have your concepts of death changed over time? What specific events caused your views to change?
- 7. Do you expect your concepts of death to change as you grow older? How?
- 8. What is your view of immortality? How do you think it contributes to your concepts of death?
- 9. Do you think your concepts of death influence the way you live from day to day? In what ways?
- 10. If you knew the exact time your life would end, would you live your life differently? How and why?
- 11. Do you think we are accountable for our actions in this life when we die? How?
- 12. What is your religious background? Are you involved in formal religion now?
- 13. Would you give your remains to science? Why or why not?
- 14. If someone emotionally close to you had a terminal illness and did not know it, but you did, would you tell him/her? Why or why not?
- 15. If someone emotionally close to you had a terminal illness, at what point would you choose not to prolong his/her life?
- 16. Are your concepts of death similar to or different from your parent's?
- 17. If you have/had children, would you expect your views of death to be different? How?
- 18. Have you made preparations in the event of your death? If so, what are they?
- 19. What do you consider stressful? What do you consider your current level of stress?
- 20. What kinds of thoughts or feelings came to mind when I told you the topic of this interview?
- 21. Is there anything you wish to add?

# APPENDIX B INDIVIDUAL ITEMS OF THE CONCEPTS OF DEATH OUESTIONNAIRE BY COMPONENT

#### DEATH AS A PERSONAL REALITY

#### CDQ # STATEMENT

- 1. In planning my future, I think of the fact that my goals may be interrupted by my death.
- 17. I am often aware that I could die at any time.
- 19. I think I am more consciously aware of death than my friends.
- 27. I value those emotionally close to me because I am aware of the possibility of death.
- 53. I am aware of living every moment to its fullest because of the possibility of death.
- 71. I am aware of not wasting my time because it is so precious.
- 93. In planning my future, I consider the entire course of my life including my death.
- 103. I believe it is important to have a will.
- 126. If given a choice, I would like to know the exact moment I will die, even if it is in the distant future.
- 131. I can understand why an individual would want to commit suicide.
- 137. I try to keep my life and relationships "in order" in case I suddenly become very ill or die.

- 10. If I knew the exact moment my life would end, and it was to be in the near future, I would live my life differently now.
- 12. When I think of the length of my life, I believe I will probably live to be at least 75.
- 37. To me death is something very far away.
- 42. Death is not a relevant issue in my life.
- 46. As I grow older, I believe I will think about death more than I do now.
- 62. I don't think about death at all.
- 63. I think of the death of those around me but not of my own death.
- 66. Assuming I was not ill and if given a choice, I would like to live forever as a human being on this earth.
- 80. It is very difficult for me to imagine that I will really die.
- 85. Although I know I will die, I rarely think of myself actually dying.
- 96. I can't imagine that I won't live a long life.
- 109. I would much rather put off thinking about death until another time.
- 113. I rarely think of my life beyond about five years in the future.
- 114. My attitude is I'll figure out how to deal with death when someone dies.

#### ORIENTATION TO IMMORTALITY

#### CDQ # STATEMENT

- 5. I expect my beliefs about immortality to change as I grow older.
- 20. My beliefs in immortality influence the way I live from day to day.
- 44. I would give my remains to science.
- 45. I believe when I die my soul will go to heaven or hell.
- 52. Although I realize one can never be sure, I have a very clear idea of what I believe happens at death.
- 60. I believe in the possibility of reincarnation.
- 67. What happens to my physical body after I die concerns me very little.
- 90. As I grow older, I believe my belief in immortality will become stronger.
- 105. Because of the injustice in this life, I believe there is only good after death.
- 112. There is a plan for my life overseen by a superior being.
- 118. When someone emotionally close to me dies, I will be comforted by the fact that he/she is in a better place.
- 121. I believe there is a spiritual superior being.
- 123. I try to live a good life just in case we are accountable for our actions after we die.
- 129. To me the major importance of life is our immortality.
- 133. I accept disappointments and setbacks as part of the greater plan for my life.
- 138. I look forward to being reunited with friends and loved ones who have died, when I die.

- 9. I believe when I die my existence in any form is over.
- 29. I believe the most important way that we are immortal is through our children.
- 40. Death is final.
- 72. I believe the concept of immortality is the result of individuals fear of the finality of death.
- 91. I rarely think about immortality.
- 99. I believe when my body dies, my soul dies, too.
- 120. I'm not sure that I believe man has a soul.
- 141. I believe it would be much better if human being knew exactly what happens when they die.
- 144. The most important way that we are immortal is in the accomplishments we leave behind.

#### ENVIRONMENT WITH REGARD TO DEATH

#### CDQ # STATEMENT

- 8. I have a clear understanding of how my parents view death.
- 14. I think death is a topic people should discuss more frequently.
- 28. I remember my parent(s) explaining death to me as a child.
- 73. If a member of my immediate family died, we would talk about our feelings associated with the death.
- 88. If my close friend had a terminal illness, I would want to share our feelings about his/her death.
- 115. I would like to discuss death more frequently.
- 117. I enjoy discussing the concept of immortality.
- 124. I know (knew) where my parents would like to be buried.
- 132. I wish our society was more open and accepting of death and the dying process.
- 146. I often discuss with friends the possibility of and ramifications of a nuclear war.

- 2. When the topic of death comes up in conversation, I try to change the subject.
- 22. I would never think of bringing up the topic of death in a discussion at an informal gathering.
- 34. I would be uncomfortable discussing death with my mother.
- 41. I would be uncomfortable discussing death with my father.
- 49. To me, discussing death is morbid.
- 57. I believe children should be protected from the realization of death for as long as possible.
- 58. Death is a topic that should be discussed primarily in religious settings.
- 75. I would be happy to never talk about death.
- 98. I don't ever know what to say to friends and relatives of someone who has died.
- 127. I have felt that I "knew" someone was going to die, and he/she did, but I never told anyone.
- 136. Going to visit people in the hospital who are very ill makes me anxious because I don't know what to say to them.
- 143. I spend more time talking with people about what I'm going to do in the future than what I am doing in the present.
- 147. If I were dying, I doubt I would talk to those emotionally close to me about my feelings.
- 149. When with someone who is terminally ill, I believe one should behave as if everything is normal.
- 150. I think about death much more frequently than I would be willing to admit to my friends.

#### EMOTIONALTITY ASSOCIATED WITH DEATH

#### CDO # STATEMENT

- 31. The thought of those emotionally close to me dying is more frightening to me than the thought of my own death.
- 54. I'm very curious about what happens at death.
- 65. As I grow older, I believe I will fear death less.
- 81. Death seems peaceful to me.
- 95. Death is frustrating to me because it will be the end of my striving towards my goals.
- 106. I am accepting of the fact that I will die.
- 130. I am very calm about dying.
- 135. One of my greatest concerns regarding my own death is the effect it will have on those who love me.
- 139. Death makes me realize that I am totally alone.
- 140. Thinking of death is depressing.

- 3. The primary emotion I associate with my own death is fear.
- 6. The primary emotion I associate with my own death is sadness.
- 18. I am intensely frightened of the potential pain associated with my death.
- 35. If I thought realistically about my actual death, I believe I would panic.
- 64. I envy plants and animals for apparently being unaware of their own deaths.
- 78. The injustice of young people dying makes me very angry.
- 87. I am intensely saddened by the thought of the death of my parents.
- 101. Thinking of my own death makes me very sad.
- 111. I am more afraid of the actual physical process of my death than the unknown after I die.
- 119. Death is unfair.
- 125. No one should have to die until he/she is ready to accept death.
- 142. Death to me is cold, desolate darkness.
- 145. I intensely dislike the fact that I will age.
- 148. Death makes me feel helpless and out of control.

## APPENDIX C INDIVIDUAL ITEMS OF TEMPLER'S (1970) DEATH ANXIETY SCALE

#### TEMPLER'S DEATH ANXIETY SCALE

#### CDQ # STATEMENT

- 13. The thought of death seldom enters my mind.
  - 15. It doesn't make me nervous when people talk about death.
- 23. I am not at all afraid to die.
  - 26. I am not particularly afraid of getting cancer.
- 232. The thought of death never bothers me.
- 79. I feel that the future holds nothing for me to fear.

- 11. I am very much afraid to die.
- 21. I dread to think about having to have an operation.
- 38. I am often distressed by the way time flies so very rapidly.
- 43. I fear dying a painful death.
- 47. The subject of life after death troubles me greatly.
- 51. I am really scared of having a heart attack.
- 56. I often think about how short life really is.
- . 70. I shudder when I hear people talking about a World War III.
- . 74. The sight of a dead body is horrifying to me.

## APPENDIX D INDIVIDUAL ITEMS OF COLLETT AND LESTER'S (1967) FEAR OF DEATH AND DYING SCALE

#### CDQ # STATEMENT

#### Fear of Death of Self

- 30. I would not mind dying young.
- 61. I view death as a release from earthly suffering.
- 89. Not knowing what it feels like to be dead does not bother me.
- 97. The idea of never thinking or experiencing again after I die does not bother me.
- 102. I am not disturbed by death being the end of life as I know it.

The following items are reversed scored:

- 4. I would avoid death at all costs.
- 24. The total isolation of death frightens me.
- 76. I am disturbed by the shortness of life.
- 83. The feeling that I might be missing out on so much after I die bothers me.

#### Fear of Death of Others

- 33. I accept the death of others as the end of their life on earth.
- 39. I would easily adjust after the death of someone close to me.
- 77. I would not mind having to identify the corpse of someone I knew.
- 84. I do not think of dead people as having an existence of some kind. The following items are reversed scored:
  - 7. I would experience a great loss if someone close to me died.
- 59. I would like to be able to communicate with the spirit of a friend who has died.
- 82. I would never get over the death of someone close to me.
- 100. If someone close to me died I would miss him/her very much.
- 110. I could not accept the finality of the death of a friend.
- 116. It would upset me to see someone who was dead.

#### Fear of Dying of Self

- 55. Dying might be an interesting experience.
- 92. If I had a fatal disease, I would like to be told.
- The following items are reversed scored:
- 25. I am disturbed by the physical degeneration involved in a slow death.
- 68. The pain involved in dying frightens me.
- 107. The intellectual degeneration of old age disturbs me.
- 134. I am disturbed by the thought that my abilities will be limited while I lie dying.

#### Fear of Dying of Others

- 16. I would not feel anxious in the presence of someone I knew was dying.
- 36. I would not mind visiting a senile friend.
- 48. If I had a choice as to whether or not a friend should be informed he/she is dying, I would tell him/her.
- 69. I would want to know if a friend were dying.
- 94. I would visit a friend on his/her deathbed.

- 50. I would avoid a friend who was dying.
- 86. I would feel uneasy if someone talked to me about the approaching death of a common friend.
- 104. I would feel anxious if someone who was dying talked to me about it.
- 108. If a friend were dying I would not want to be told.
- 122. If I knew a friend were dying, I would not know what to say to him/her.
- 128. I would not like to see the physical degeneration of a friend who was dying.

### APPENDIX E DEMOGRAPHIC INFORMATION QUESTIONNAIRE

### Demographic Information

Name:	
	_ (please print)
Address:	_
T. 3	_
Telephone:	
Gender:	
Male	
Age:years	
Education: (highest level achieved)	
Occupation: (if student, note major)	
Marital status:	
Number of children:	
Age of parents:	
Marital status:   Number of children:	

Occupation of parents:						**		
Father:								
Mother:								
Has anyone ever died who was emotionally close to you? Yes No								
If yes, please list (e.g., mother ago he/she die	, uncle, close							
Relationship	How long ago?	Daily	life	aff	ected	then		
		٧s	S	M	٧L	NA		
		٧s	S	M	٧L	NA		
		٧s	S	M	٧L	NA		
		٧s	S	М	۷L	NA		
		٧s	s	M	٧L	NA		
A-1-15-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	<u></u>	٧s	S	M	٧L	NA		
Beside each individual at the time of his/strongly (VS), stronot at all (NA).	her death your o	daily l	ife w	as a	ffect	ed: very		
Of the individuals listed above, if your life at the present time is affected by his/her death, please list again below the relationship of that individual to you. Please indicate the degree to which your daily life is currently affected: very strongly (VS), strongly (S), moderately (M), very little (VL), or not at all (NA).								
Relationship	How long ago?	Daily	life	aff	ected	now		
		٧s	S	M	٧L	NA		
	***************************************	٧s	S	M	٧L	NA		
		٧s	S	M	٧L	NA		
		٧s	S	M	٧L	NA		
		٧s	S	M	٧L	NA		
		۷s	S	M	۷L	NA		

Thank you for your valuable time and your cooperation in completing these questionnaires. If you would like to be contacted concerning the results of this study please indicate below:

Yes \_\_\_\_\_ No \_\_\_\_

## APPENDIX F PARTICIPANT CONSENT FORM

### College of William and Mary Psychology Department Consent Form

The general nature of this study on concepts of personality and death to be conducted by Tricia Frazier has been explained to me. I understand that I will be asked to respond to questions concerning my views of issues surrounding life and death. I further understand that my responses will be confidential, and that my name will not be associated with my responses or any results of this study. I know that I may refuse to answer any question asked, and that I may discontinue participation at any time. I also understand that any grade, payment, or credit for participation will not be affected by my responses or by my exercising any of my rights. I am aware that I may report my dissatisfactions with any aspect of this study to the Psychology Department's Research Ethics Committee. My signature below signifies my voluntary participation in this study.

Date	Signature	
	~	

#### VITA

#### PATRICIA HUNTER FRAZIER

The author was born on March 3, 1953 in Warrenton, North Carolina. She attended Meredith College and graduated from The University of North Carolina at Charlotte with a B.A. degree in Business Administration in 1975. In 1982, after working as a marketing representative for seven years, she began studying psychology at Wake Forest University, completing the requirements for an undergraduate psychology major in 1984. She began her studies toward an M.A. degree in Psychology at The College of William and Mary in Virginia in August of 1984. The candidate was awarded the Master of Arts degree in May of 1986. She intends to continue her studies in this field and pursue a career in psychology.